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ABSTRACT

This two-volume compilation classifies, describes, and critiques 159 clinical nursing instruments: 140 which measure psychosocial variables, 19 which measure physiological variables. Instruments are in various formats: paper and pencil tests, questionnaires, interview schedules, observation guides, rating scales, and mechanical devices such as electrocardiographs. The physosocial instruments are classified by variable measured (cognitive, affective, health status, and so on) and subdivided by type of respondent (health care provider, client, or significant others). Each psychosocial instrument is described as follows: title, author, variable, nature and content, development, reliability and validity, research applications, comments, references, source of information, and copyright information; 135 of the instruments are reproduced here. The physiological tools are classified by body system and described as follows: title, variable, parameters, research applications, description, and comments. The compilation focuses upon nursing practice, not nursing education, and stresses patient variables rather than nurse variables. Instruments were selected from the published literature in health care, education, psychology, and the social sciences. The appendices contain background information on instrument selection, and author, title, and subject indices. (CP)

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Instruments for Measuring Nursing Practice and Other Health Care Variables

VOLUME 1

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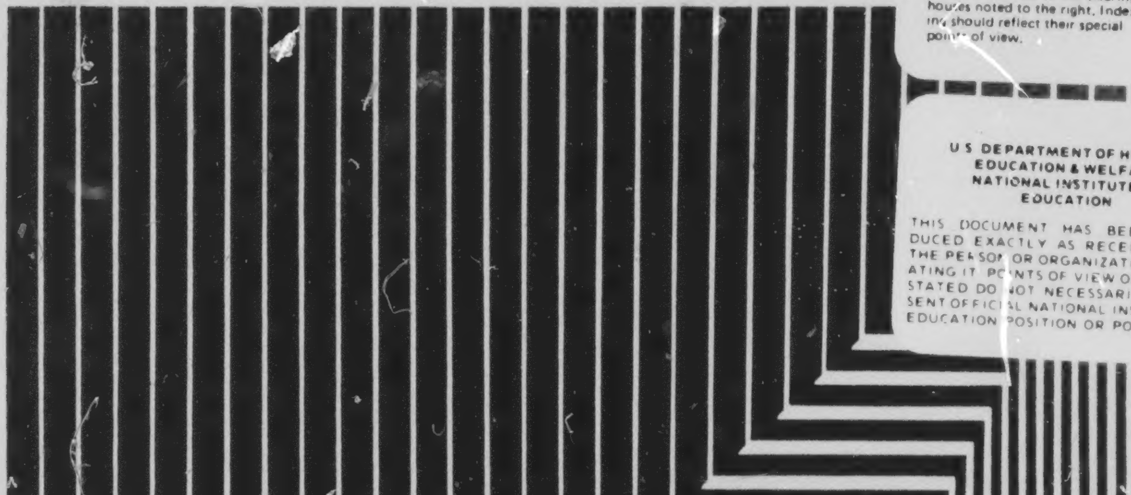

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • Public Health Service • Health Resources Administration

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Instruments for Measuring Nursing Practice and Other Health Care Variables

VOLUME 1

HEALTH MANPOWER REFERENCES

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FOREWORD

This compilation and critique of nursing research instruments was initiated in response to an expressed need of nursing researchers for such a compilation. A number of universities and other agencies concerned with nursing research had been collecting nursing research instruments to assist investigators in their own respective agencies in locating appropriate tools to measure the many unique variables encountered in nursing research. Such collections were of necessity limited in scope and availability. It became clear that the need for a comprehensive collection existed, and, furthermore, that it would be of considerable help to potential researchers if the tools were not only brought together in one place, but if they were also critiqued. Such extensive treatment of each instrument would guide researchers in their choosing of the most appropriate tool, on plans for further testing of an existing tool, and on the need to construct a new tool. A compilation of instruments would prevent duplication of instrument-development efforts, and would stimulate the development of high quality instruments in the future.

The Division of Nursing is committed to research to improve the practice of nursing and supports high quality research projects under both grant and contract mechanisms. As measurement of variables is an integral part of any research project, this compilation is expected to assist researchers in nursing and related fields nationwide in planning and carrying out their research projects.

Jessie M. Scott

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Assistant Surgeon General
Director
Division of Nursing

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Chairperson, Executive Board
Western Council on Higher Education for Nursing
Kevin P. Bunnell, Ed.D.
Associate Director, Western Interstate Commission for Higher Education

Planning and developing this compilation of research instruments for measuring nursing practice and other health care variables was a complex and arduous task. It was accomplished by the support, commitment, and cooperation of many persons. We feel they deserve special mention.

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Gladys Courtney, R.N., Ph.D.
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Helen M. Gurney, B.S.

The project staff are interested in knowing if enough information about each instrument has been provided and whether the material is presented in a useful format. They would appreciate the reader's comments directed to:

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INTRODUCTION

In June 1974 the Western Interstate Commission for Higher Education (WICHE) was awarded a contract by the Division of Nursing, Bureau of Health Manpower, Health Resources Administration (DHEW), to prepare for publication a compilation of nursing research instruments and other measuring devices. The scope of work stated that the contractor would:

1. Develop a plan for conceptually delimiting the scope of the compilation;
2. Specify criteria for inclusion and exclusion of items in the compilation;
3. Develop a rationale for inclusion and exclusion of the instruments themselves in the publication;
4. Search the literature, including unpublished sources, and identify items suitable for inclusion, according to the criteria developed for that purpose, and falling within the defined scope of the compilation;
5. Write a review of each item to be included in the compilation; the proposal should contain a discussion of all categories to be included in such a review.

The project, which began in July 1974, was completed in February 1977.

Background

A frequently cited barrier to conducting clinical nursing research is the lack of appropriate data-gathering instruments. Sometimes this lack is more apparent than real—a suitable device exists, but the researcher was not successful in determining either its existence or the information necessary to use it. The results in this case are frustration, duplication of effort, increased costs for research, and prolongation or cessation of the research endeavor. Obviously, then, inaccessible measuring instruments constitute a considerable waste of resources.

For nursing research, the problems related to the search for suitable data-gathering devices is compounded by the fact that nursing is based upon scientific knowledge generated by many fields of inquiry. Nurse researchers seek tools, for example, from psychology, sociology, physiology, and anthropology. It is virtually impossible for one person to be familiar with the current data-gathering devices in any one field, much less all.

A compilation of data-gathering instruments, which included descriptions, critiques, and copies of selected tools, was identified as one efficient means of increasing accessibility. A number of such compilations exist for behavioral science instruments and are listed in Appendix A. These resources are helpful but not specific to the variables of nursing practice and health care. A compilation of instruments for measuring such variables was not known to exist when this project was conceived.

The primary aim of this project, therefore, was to develop a compilation of data-gathering devices for measuring nursing practice and other health care variables as one means of increasing the quality and quantity of future nursing and related health care research, as well as the effectiveness and efficiency with which that research is conducted.

Advisory Committee

Two advisory committees were used to assist the project staff in decisionmaking regarding the scope of the compilation and the actual nature and format of its content. The Project Advisory Committee provided assistance and consultation regarding all major areas of decisionmaking. The Physiology Advisory Subcommittee guided the development of the physiological section of the compilation. The individuals who served on these committees are identified in the Acknowledgments.

Operational Definitions

For the purposes of this project, the following operational definition of an instrument was applied: A data-collecting device or tool used to assist in the process of securing observations in a manner that allows for quantification, e.g., a paper-and-pencil test, a questionnaire, an interview schedule, an observation guide, a rating scale, a mechanical instrument. The terms "tool", "instrument", and "data-gathering device" are used interchangeably in the compilation.

Other operational definitions are provided in Appendix C.

Scope of the Compilation

The first charge to the project staff and its advisory committee was to limit conceptually the scope of the compilation. This task, which at first appeared simple, continued to haunt the staff throughout the entire project.

The staff wanted to limit the scope of the compilation to give focus to the search for instruments. It was assumed that this first compilation could not be both intensive and extensive across all of the variables related to the profession of nursing. Decisions had to be made regarding which topics, areas, variables, and the like would be included and which would be excluded.

After lengthy deliberation, the staff, in collaboration with the project officer and Advisory Committee, decided to exclude those instruments dealing with nursing education and to focus only on those dealing with nursing practice. Furthermore, patient variables, rather than nurse variables, were to be given priority. It was also decided that both psychosocial and physiological instruments were to be included. Although these decisions did influence the scope of the compilation, the resulting compilation is still broad in scope, and its conceptualization is less precise than desired.

Currently, there is nationwide interest in patient outcomes of health care. Sets of "outcome criteria" now being developed by many health care professionals to be used in quality assurance programs have been excluded from this compilation because such sets are largely listings of variables or standards ("knowledge of medications," "patient knows the side-effects of his medications") rather than tools to measure the variables. A user interested in the measurement of patient outcome variables would want to examine the section on patient variables. In addition, the variable "patient satisfaction with care," also often used as an outcome variable, is found in the section on provider-patient interaction. It was conceptualized—along with the provider's perception of care—as an aspect of the care process.

Classification of the Instruments

There were also plans to develop a taxonomy of classification system to organize the instruments. Several approaches were used, including some that began with a model of the nursing process or an existing classification scheme, and others that required a content analysis of the instruments selected for possible inclusion. Not until all instruments were actually assembled was it possible to develop a classification system. Even then, the system was applicable only for psychosocial instruments. Physiological instruments required a separate classification system.

To develop a classification system for the psychosocial tools, the staff and project officer used an inductive approach, working independently at times and at other times as a group. The process they used included sorting, resorting, resorting again, labeling, conceptualizing, and comparing. Finally a model was developed which could serve as a guide to the classification of the instruments in the publication. Primary credit for the model shown in figure 1 belongs to the project officer. Although it needs further development, it is hoped that the model will (1) help the user to locate a needed instrument, (2) facilitate comparison of the strengths and weaknesses of several instruments measuring the same or similar variables, and (3) identify gaps in instrument development.

In using the compilation, it is important to realize that classification of the psychosocial instruments was complicated by the fact that many, if not most, of the instruments measured more than one and often multiple variables. With those tools, the project staff then decided which multiple variable was primary. Many instruments could have been classified in more than one category, but were not because each instrument could be included only once in the publication. For this reason, several indices were constructed.

It should also be noted that instruments were classified on the basis of the variable measured rather than on the basis of the type of respondent. For example, an instrument measuring patient anxiety could be administered to a patient, nurse, physician, relative, or outside observer; however, the variable still remains patient anxiety.

Several approaches were considered for classifying the physiological tools. Initially, it was hoped to classify them by the variable measured. However, each instrument could be used to measure one of several variables, and it proved to be extremely difficult to identify one primary variable for each instrument. Consideration was given to classification by instrument type such as electrical or mechanical, but that did not seem a useful approach for this compilation. A body system approach was finally selected for classification.

In summary, the scope of the compilation is extremely broad, cutting across a wide range of variables and types of data-collecting instru-

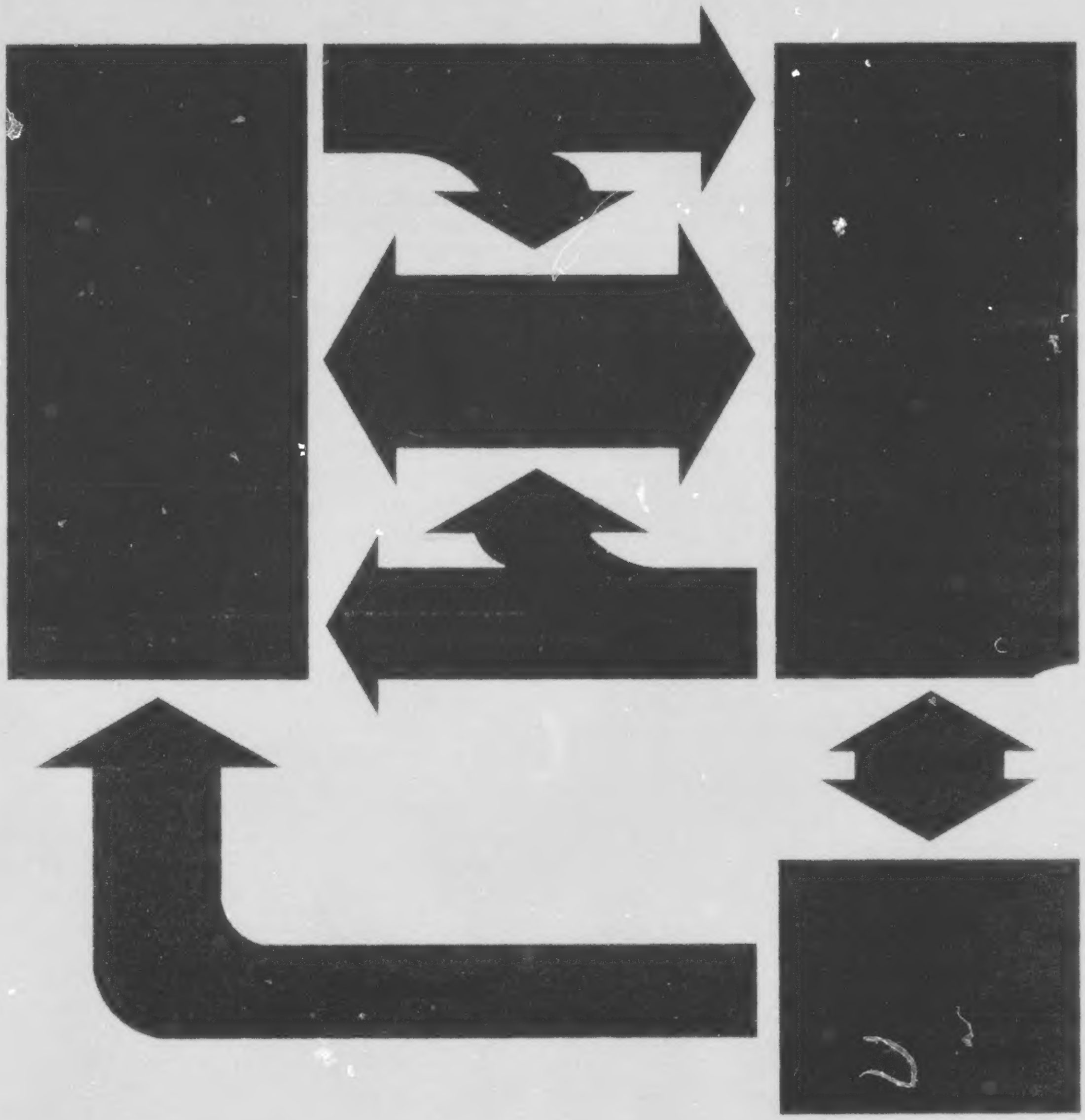

Figure 1.—Bloch model for the classification of psychosocial instruments

ments. Both psychosocial and physiological instruments are included. The compilation is limited to instruments that relate directly to nursing practice; psychosocial instruments described in other readily accessible source books are not included, but appropriate citations are provided (see Appendix B). The psychosocial instruments are organized to correspond to the model presented in figure 1. The physiological instruments are organized to correspond to body systems.

Description of the Compilation

Copies of 325 psychosocial instruments were assembled. Of these, 34 were identified as already included in other readily accessible compilations; thus, they were not considered for inclusion in this publication. Others did not meet one or more of the criteria for inclusion; for some, the information deemed necessary was not available; for others, the author(s) could not be located.

The final compilation consists of descriptions and critiques of 140 psychosocial instruments and reproductions of 135 of them, and descriptions of 19 instruments that can be used to measure physiological variables of interest to nurses and other health care personnel. These materials are contained in two volumes. Volume 1 contains the descriptions and critiques of the psychosocial instruments and copies of the psychosocial instruments for which reproduction releases could be obtained. Volume 2 contains the descriptions of the instruments to measure the physiological variables, annotated bibliographies for each of the two major sections, a referenced list of those psychosocial instruments collected but already described in other compilations, the appendixes, and the indices.

The format for the description of each psychosocial instrument provides the following information in the order given: title; author; variable; description of the instrument—nature and content, administration and scoring; development of the instrument—rationale, source of items, procedure for development, reliability and validity; use in research; comments; references; source of information; and copyright information.

The format for the description of each physiological instrument is as follows: title of instrument, variable, parameters, research application, description, and comments.

Criteria for Inclusion of Psychosocial Instruments

Seven criteria established by the Advisory Committee governed the selection of instruments: (1) that the instrument appear or is described in published literature; (2) that information be available from the author to complete the first three sections of the description format; (3) that the instrument contain a logically or systematically derived pool of items of potential value to clinical nursing research; (4) that the clinical nursing variable the instrument measures be readily identified; (5) that the clinical nursing research function the instrument could serve be readily determined; (6) that in the professional judgment of project staff and project officer, the instrument have potential value for clinical nursing research; and (7) that the instrument not be described and/or critiqued in any other readily accessible published compilation.

Although these criteria were adequate in most cases, there were some instruments that required additional consideration before a decision for inclusion could be made. In fact, any instrument that did not meet the above criteria was reviewed independently by staff and the project officer. Following this, a recommendation for inclusion or exclusion was then made and supporting rationale provided; a vote was taken and the majority ruled.

As mentioned previously, several tools in the area of outcome criteria were excluded because they did not meet the operational definition of an instrument. That is, the instrument was a place for the systematic recording of observations but was not designed or conceptualized in terms of quantification. Other instruments were excluded because the authors were in the process of initial pilot testing. It seemed more reasonable to include these instruments in a future edition of the compilation.

To develop an explicit process and explicit comprehensive criteria for instrument selection, the staff and project officer worked diligently. Decisions were supported by sound rationale. A determined effort was made to avoid making arbitrary decisions.

Search for Psychosocial Instruments

The major efforts to locate psychosocial instruments were directed toward published literature. Because instruments of potential interest to clinical nursing research are common to many disciplines, the search was not confined to nursing literature or even to the literature of the health care field. Journals in the fields of anthropology, education, psychology, and sociology were included in the search, as were journals in the nursing-related fields of medicine, dentistry, and nutrition.

A page-by-page search was made of the nursing literature and selected health-related journals; other journal sources were identified through computer searches, abstract listings, and indices. The complete listing of the journals and materials searched is found in Appendix D.

In addition, a general solicitation requesting submission of instruments was carried out by placing notices in nursing journals and publications likely to be read by persons developing data-collecting instruments relevant to nursing research; and by sending letters to persons in nursing research positions in educational institutions, hospitals, and other health care agencies.

Procedural Steps Following Identification of A Psychosocial Instrument

In the search of the literature and other resources, names of individuals who had developed, used, and/or guided the development of a data-collection device were identified. Current addresses were obtained from professional directories or individual contacts as necessary, and individuals were contacted for information about the development or use of a particular instrument.

The information requested about each instrument included: variable(s) being measured, description of instrument, type of data collected, procedure for administration, procedure for establishing reliability, procedure for establishing validity, discriminatory power of instrument, references for studies that had used this instrument for data collection, and comments or suggestions about the instrument and its use that the person supplying the information wanted to provide. A copy of the form used for this purpose is contained in Appendix E.

When the necessary information about an instrument had been collected, using the criteria established by the Advisory Committee, the instrument was evaluated for possible inclusion in the compilation by project staff. Following the tentative decision to include an instrument, a staff member wrote a description and critique, which was then reviewed by the project director prior to forwarding it to the author(s) for approval and review. Once returned from the author(s), the descriptions and critiques, as well as the instruments, were reviewed by selected experts prior to final editing of the compilation. The material was revised until it was satisfactory to the author(s), the project staff, a member of the panel of experts, and the project officer.

Guidelines for Use: Psychosocial Section

The editors are concerned that users appreciate the strengths and limitations of the compilation before using it. In this way, it is hoped the compilation will be used to the fullest possible advantage.

The compilation is one response to problems of the accessibility of tools and the availability of information regarding psychometric characteristics of instruments. Each instrument is described and critiqued in a succinct manner but still relaying significant information. The critique contains factual information, as well as staff impressions generated by available material about a given instrument. The process used in developing the critiques attests to the degree of confidence the user can have in the accuracy and completeness of the critiques.

This compilation is not a list of recommended instruments, nor does it tell the user which instrument to use. It does, however, expose the user to a large number of instruments. Although the compilation does not, nor could not, replace the thinking process the user must employ, it can facilitate effective decisionmaking. It does not explain how to measure a given variable, but it can facilitate the exploration of a variety of approaches to measuring a given variable. The compilation is not a presentation of thoroughly tested instruments ready for use. It includes instruments that are in their early stages of development, as well as instruments having substantial psychometric development that will enable the user to build upon previous work. The critiques emphasize that no instrument is ready for other researchers' use without pilot testing in their particular setting with their potential population.

The following information is provided to assist the user in understanding the organization of content within the description and critique of each instrument.

Title

The title listed is the one used by the author, or, in the absence of an author's title, it is one developed by the staff. The title may be misleading, in terms of the variable measured or in terms of the nature of the instrument (such as "semantic differential"). The user can be sure only that the title is a potentially helpful guide in searching for an instrument.

Author(s)

The author(s) listed is (are) the person(s) who developed an original instrument or significantly modified an existing instrument.

Variable(s)

The variable being measured and its operational definition as explicitly or implicitly stated by the author is provided under this heading. As mentioned, many instruments were designed to measure several variables. In such instances, all variables and definitions are provided in this section—not just the one used to classify the instrument.

The user is cautioned that the problems of labeling and defining terms are apparent in this part of the instrument description. The same label is used by different authors to describe different operational definitions; different labels are used for similar behaviors, etc. Definitions exist at various levels of abstraction and clarity. Certainly the user needs to study this section thoroughly to determine if the author is measuring the same variable the user hopes to measure by label, definition, and operationalization.

Description

Nature and Content: This section contains information regarding the length and format of the instrument. It also contains information on how the variable was operationalized in terms of specific items of the instrument. The user should be able to deduce an instrument's suitability to a particular sample in terms of energy and skill required to complete it. It should also confirm agreement or disagreement between potential user and instrument author regarding the nature of the variable.

Administration and Scoring: How the instrument is administered in terms of the respondent, setting, and data collector is described. This is followed by information on scoring. The procedures for obtaining a total score and subscores, if they exist, are presented. Existing rationale for the scoring procedure is included whenever such information was available.

The user should be able to deduce cost factors associated with administration of the instrument, as well as necessary setting characteristics. The meaning of the score or scores produced by the instrument should also be considered when reviewing this section.

Development

Rationale: The theoretical or conceptual framework underlying the instrument and its development is described in this section. Because many instruments included in the compilation are not directly linked with a theory, the reason the author developed the instrument may be stated here.

This section should assist the user in understanding the conceptualization of the variable being measured, as well as provide a broader conceptualization including related variables. This may help the user determine the sensitivity of the instrument for the proposed research.

Source of Items and Procedure for Development: These two sections contain information about the process for generating specific items and their refinement for inclusion in the first version of the instrument.

In these sections, the user should obtain information regarding the construct validity of the instrument and its general credibility. Frequently, the user will read in the critiques, the phrase "from the experience of the author" or a comparable statement. The user needs to determine the credibility of that experience or the other sources described in relation to the variable(s) being measured. For example, the question might be raised of whether or not the instrument is likely to be culture bound because of the source of the items and the steps involved in its development.

Reliability and Validity: The psychometric characteristics of the instrument in terms of reliability and validity testing are described in this section. Definitions of these terms are contained in Appendix C. In general, information as it was presented by the author is reported in this section.

The user must remember that different procedures for determining reliability and validity take into account different problems or concerns. Furthermore, the issues surrounding reliability and validity cannot be viewed in absolutes. An instrument is not either reliable or not, valid or not. Statistics obtained under certain testing questions may be reported to guide the user in determining the promise of the instrument. Evaluation of the reliability and validity studies by the potential user is necessary before using any instrument. Among other points, consideration should be given to the type of procedures used for any reliability and validity testing, sample size, sample characteristics, and the author's conclusions from the testing.

Many of the instruments included in this compilation have had minimal psychometric development. They were developed for a single piece of research rather than for a broader use. This is not a reflection of whether the instrument is "good" or "bad." It does attest to the need for the user to assess the psychometric properties of the instrument before using it.

Use in Research

Published articles or other references in which the instrument has been used are identified when known. The user may infer the popularity of the instrument from this information but not necessarily the adequacy of its psychometric development.

Comments

Prior to this section, the critique has consisted of factual, descriptive statements. In this section, the impressions of the author, the staff, the project officer, and the consultants are summarized. Sometimes comments are made regarding the reading level or the nature of the items. Comments may be made about reliability and validity. Because it might be said that all instruments need additional testing—some more than others—such a statement is not made for each critique. Comments may be made about the operational definition if it is atypical. In general, a comment may be made about any of the preceding sections, or comments may be included that originated from a critical review of the instrument itself.

The user should review this as an opinion section, realizing that the opinions reflect nursing, as well as psychometric expertise. This section varies considerably in length; there is no relationship between the potential value of an instrument and the length of this section.

References

References describing the development and use of the instrument are listed here.

Source of Information

The person who supplied the staff with information about the instrument and its use is listed here. In most instances, this was the author of the instrument.

Instrument Copyright

If an instrument has been copyrighted, the individual or organization holding that copyright is identified here. This is also the person or organization whom the researcher should contact for permission to reproduce and use the instrument.

Criteria for Inclusion of Physiological Instruments

The Advisory Subcommittee, which was composed of three nurse physiologists, developed a tentative list of physiological instruments for inclusion. This committee revised the list several times before a final one emerged. Project staff, the project officer, and a bioengineer provided additional input during the refinement process. The final list includes those instruments that met the following criteria: (1) it measures one or more variables that have been or are likely to be studied by a nurse, (2) it is suitable for research in a patient care setting, and (3) it is available in a model designed for the collection of data with human subjects.

Identification and Description of Physiological Instruments

As described in an earlier section, the Physiology Advisory Subcommittee developed a tentative list of instruments suitable for inclusion in this compilation. The final list reflected decisions about both the nature of the variable and the characteristics of the instrument for measuring the variable.

The descriptions of instruments included in this compilation are based upon materials prepared by a bioengineer, a doctorally prepared nurse physiologist, a research physiologist, and a nurse with advanced clinical and physiological preparation.

Guidelines for Use: Physiological Section

As with the section on psychosocial instruments, this section is not meant to be a list of instruments recommended for potential researchers to use, nor should its contents be construed as suggesting which human physiological variables nurses should measure or investigate.

All electronic instruments that are used on humans, whether for monitoring or research purposes, invasive or noninvasive, need to be checked and certified for electrical current leakage. Maximum leakage standards have been established by the Occupational Safety and Health Administration (OSHA). Institutional bioengineers are the persons who certify the electronic instrumentation. If an institution does not have an engineer, the Association for Advancement of Medical Instrumentation can be consulted as well as OSHA for assistance.

In an effort to maximize the usefulness of the compilation, information for each physiological instrument is presented in the following format:

Instrument: As the heading indicates, this is the instrument(s) or test(s) being described.

Variable(s): The variable or variables most commonly assessed by the instrument are identified here, along with any additional information, e.g., definitions, explanations, amplifications, which it was deemed might help the reader at this point.

Parameters: Background information about the instrument and its uses is provided under this heading.

Research Applications: This section is devoted to information about how the instrument has been used in research, how it is currently being used in research, and/or how it could be used in research in a patient care setting by a nurse.

Description: Information about the instrument itself, its components, and/or how it operates is contained in this section.

Comments: This section varies greatly both in content and length. It may be new information deemed pertinent to the description. It may contain words of caution regarding the instrument, its uses, or the data derived from that use. It may contain information regarding the skills a researcher must possess in order to use the instrument properly. It may amplify the material presented in any of the preceding sections of the description. It may also contain information about optional instrument features a potential researcher might want to consider, or it may pertain to the cost of the instrument.

PSYCHOSOCIAL INSTRUMENTS

Health Care Provider Affective Variables

Title: ENVIRONMENTAL FEAR SCALE

Authors: Castles, Mary R., and Keith, Patricia M.

Variable: Public health nurses' fear of the environment is the variable. It is operationally defined as "the perception of threat and the frequency of threat associated with a given spatial area."

Description:

Nature and Content: This is a one-page, self-report rating scale. The first item asks, "Are you ever afraid during your working day?" The next eight items specify environmental areas where fear might be experienced. Space is provided for the respondent to specify other areas where he(she) may have experienced fear. Five response alternatives are provided: never, infrequently, sometimes, often, always.

There is a brief introductory paragraph at the top of the form preceding the directions.

Administration and Scoring: The instrument is self-administered, and no particular arrangements or settings are required. It can be completed in approximately 5 minutes. Subject scores are obtained by summing across the 10 items; total possible scores range from 1 to 50.

Development:

Rationale: The authors stated that the instrument was not based on any specific theory.

Source of Items: The items were derived from unstructured interviews with graduate students who had recent public health experience.

Procedure for Development: From the interviews mentioned above, items were developed, submitted to another sample of public health nurses, and revised based upon input from that sample.

Reliability and Validity: Cronbach's alpha produced a reliability coefficient of 0.91; the Cornell Technique of Scalogram Analysis produced a reliability coefficient of 0.93. In addition to face validity, there is evidence of construct validity as shown by the fact that respondents whose families and colleagues expressed concern about their safety scored higher than others. The instrument was utilized in a sample of 159 public health nurses, students, and staff employed by or assigned to official and nonofficial agencies who were working in neighborhoods with various social, economic, and racial characteristics.

Use in Research: A description of the instrument and its use is contained in the articles referenced below.

Comments: This instrument appears to have potential for development into a useful tool for measuring environmental fear. A more refined scoring system would increase the instrument's reliability, i.e., assigning numerical frequencies to the answer choices as opposed to the present choices. Too, in order to be assigned a score of 50, a respondent would have to have completed the tenth item "Other"; no specific information was provided relative to that item.

Some evidence of validity is shown in the difference in scores for nurses whose families and colleagues expressed concern for their safety, as compared with other nurses. As the items are now written (e.g., going into the home, during the home visits), its applicability is limited to public health nurses or others who make home visits. However, it would be easy to adapt the instrument as a tool for measuring environmental fear for a more general population. This might be useful, for example in the study of health-seeking behavior (e.g., going to clinics, etc.). The instrument might also be adapted to development of an enviornmental fear scale for hospital patients.

References:

Castles, Mary R., and Keith, Patricia M. Correlates of environmental fear in the role of the public health nurse. *Nursing Research*, 1971, *20*, 245–249.

Keith, Patricia M., and Castles, Mary R. Fear and rejection of patients by health practitioners. *Social Science and Medicine*, 1975, *9*, 500–505.

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Instrument Copyright: None.

Castles, Mary R., and Keith, Patricia M.

ENVIRONMENTAL FEAR SCALE

There have been a good many stories in the newspapers and on television recently about "crime in the streets." The stories are frequently about a woman being attacked, having her purse snatched, being threatened by a large group of young people, etc. Many women have stated that they are afraid to be on the streets along.

It would be understandable if public health nurses, who are women who are frequently on the streets along, should share this fear.

Are you afraid: (Please check the blank which best describes how you feel for each statement.)

Never	Infrequently	Sometimes	Often	Always	
_____	_____	_____	_____	_____	Driving along the street.
_____	_____	_____	_____	_____	Walking along the street.
_____	_____	_____	_____	_____	Waiting on the street (for a bus, a light change).
_____	_____	_____	_____	_____	Getting into and out of your car.
_____	_____	_____	_____	_____	Going into the home.
_____	_____	_____	_____	_____	During the home visits
_____	_____	_____	_____	_____	In the halls of a building.
_____	_____	_____	_____	_____	On the stairs in a building.
_____	_____	_____	_____	_____	In the elevator.
_____	_____	_____	_____	_____	Other (please specify.)

Title: LIFE-PROLONGING SCALE

Author: Degner, Lesley

Variable: This instrument was designed to measure attitudes toward prolonging life. A life-prolonging decision is defined as "a judgment made by a physician to institute, withhold, continue, or withdraw life-prolonging measures for a patient" (Degner, 1974).

Description:

Nature and Content: The Life-Prolonging Scale consists of four questions. Each question follows a description of a particular situation and asks the respondent to indicate his(her) degree of agreement or disagreement with a judgment made to prolong or not to prolong the life of a patient in a hypothetical situation. Two of the four situations involve a decision to prolong life, and one situation involves a patient with positive and one with negative social status value.

Administration and Scoring: Instructions are included on the self-administered questionnaire.

Only the first three items are scored. Responses to the questions are scored 0 or 1. Zero means that a respondent agrees with a decision to prolong life or disagrees with a decision not to prolong life. One means that a respondent agrees with a decision not to prolong a patient's life or disagrees with a decision to prolong life. Scores on the Life-Prolonging Scale range from 0 to 3. A low score means a person appears to be a life-prolonger, a high score the opposite.

Development:

Rationale: Advances in medical technology have intensified the conflict between the traditional medical goals of prolonging life and preventing suffering. Conflict occurs when an application of certain techniques could prolong a patient's dying or withdrawal of the techniques could permit his death to occur. In such situations there are few rules available to guide the physician in his decisionmaking, and often choices cannot be made entirely on the basis of empirical facts. Moral or philosophical considerations may play a part in the decisionmaking, thus fostering the frequently expressed notion that the beliefs of the physician may influence his decisions in prolonging or not prolonging patients' lives (Degner, 1974).

Source of Items: The descriptive situations were based upon a review of the literature and the professional experience of the author and peers.

Procedure for Development: The four situations were judged by a panel of four physicians to be typical of situations encountered in clinical practice. The structure of the situations and the system of scoring were based upon the patient's social value and the type of decision made by the imaginary physicians. Data obtained from the scale were analyzed to determine the reliability and validity of the scale.

The sample used to develop this test consisted of 92 physicians who were willing to respond to the Life-Prolonging Scale. The sample represented 51 percent of the house and attending staff of a 300-bed nonsectarian hospital located in an urban area of the northwestern United States.

Reliability and Validity: A scalogram-type analysis of responses to the four situations resulted in a coefficient of reproducibility of 0.89, a coefficient of scalability of 0.44, and indicated that situation four was poorly correlated with the scale of 4 items. A second scalogram analysis of the responses to the first three situations yielded a coefficient of reproducibility of 0.96 and a coefficient of scalability of 0.80; therefore, the decision to score only the first three items.

Approximately 80 percent of the respondents had a high score on Life-Prolonging Decision. That is, approximately 8 out of 10 agreed with a decision not to prolong life in these situations. Degner notes that these results appear to be similar to those from two other studies which used a different procedure for obtaining information about this variable.

The Life-Prolonging Scale scores were also examined to determine how they were related to the factors produced from a semantic differential scale for the concept of death. Life-Prolonging Scale scores were significantly related ($p < 0.01$) to the semantic differential factor labeled "evaluative." Specifically, 38 percent of the respondents who had a low score on the Life-Prolonging Scale had a positive view on the evaluative factor of the semantic differential while 8 percent of those who had a high score on the Life-Prolonging Scale had a positive view on this semantic differential factor.

Use in Research: The development and use of this instrument are described in the article by Degner (1974) referenced below.

Comments: This test appears to be easy to administer and score. Preliminary results indicate that there is at least a moderate degree of consistency of response to the three situations.

And, the Life-Prolonging Decision score appears to be related minimally to other variables such as respondent's age, sex, and religion. Consequently, the test has a good possibility of providing reliable and valid information about health care professionals' attitudes in this domain.

Finally, additional work needs to be done to increase the variance, since 80 percent of the respondents obtained high scores on the instrument. It would seem that responses to items should form a Guttman scale, and responses should be distributed so that the mean is about 50 percent in favor of life-prolongation.

References:

Degner, L. The relationship between some beliefs held by physicians and their life-prolonging decisions. *OMEGA*, 1974, *5* (3), 223–232.

Source of Information:

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Instrument Copyright: None.

Degner, Lesley

LIFE-PROLONGING SCALE

SECTION III

Directions: The following are four situations which physicians may encounter in clinical practice. Given the amount of information each situation provides, please indicate your degree of agreement or disagreement with the imaginary physicians' decisions by circling one of the five possible responses.

SITUATION #1: Mr. S. is a 54 year old man with Laennec's cirrhosis. The patient is well known to the staff for his frequent admissions to hospital in pre-hepatic coma, which invariably follow a drunken spree. At present hospitalization, the patient is in hepatic coma, and despite one week of vigorous medical treatment, the coma persists. During the night, the patient begins to bleed from his esophageal varices, and his blood pressure begins to fall. The intern leaves orders for blood replacement and the application of an intra-esophageal device to control bleeding. By the following morning the patient's bleeding has stopped and remains stopped when the device is removed, but the patient remains in coma. The attending physician instructs his house staff that if the patient begins to bleed again, they are not to attempt to stop the bleeding.

Would you	STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE	STRONGLY DISAGREE

with the attending physician's decision?

SITUATION #2: Mr. M. is a 65 year old man admitted to hospital with a possible myocardial infarction. The patient is well known to the staff in the coronary care unit, as much for his national prominence as a renowned performer as for his two previous visits to the unit--the first time after a period of myocardial ischemia, and the second time after a small anterior myocardial infarction. The patient has spent the two years since his recovery from the anterior infarction in the usual pursuit of his career. Twenty-four hours after his admission to the unit, the patient's heart arrests. With much effort on the part of the staff, a spontaneous heart beat is restored, but the patient's respiration must be maintained artificially. The patient remains unconscious. After one week of repeated neurological examinations and flat EEG recordings, the physicians consider that brain death has probably occurred. In a conference, the group of physicians decides to maintain the present treatment regimen in the hope that the patient might regain consciousness.

Would you	STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE	STRONGLY DISAGREE

with the group's decision?

SITUATION #3: Mr. L. is an 85 year old man with a long time diagnosis of "senile dimentia." Prior to his present hospitalization, he had been living in a nursing home for four years. He is admitted to hospital with dehydration and pneumonia. The attending physician prescribes the usual regimen of antibiotics, fluid replacement, chest physiotherapy, etc. The patient's pneumonia begins to respond to these measures, but at the same time his urine output begins to fall. The patient experiences a prolonged period of anuria, such that it is evident to the attending physician that dialysis will be necessary if the patient is to survive the episode of acute renal failure. The physician goes ahead with arrangements for the patient to receive dialysis.

Would you	STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE	STRONGLY DISAGREE

with the physician's decision?

SITUATION #4: Carl is a 6 year old boy with acute lymphatic leukemia. He was first diagnosed 12 months ago, and with chemotherapy has experienced 3 periods of remission. At his present hospitalization, his physicians have been unable to attain a remission. The patient is very weak, and is experiencing severe joint and bone pain. The attending physician notes that the patient's blast cells are extremely high, and that there is severe depression of platelet counts. Examination of the child reveals increased intracranial pressure due to bleeding in the brain. The physician decides to change the treatment regimen, stopping the platelet transfussions and chemotherapeutic drugs, while continuing analgesics and steroid medication.

Would you	STRONGLY AGREE	AGREE	DON'T KNOW	DISAGREE	STRONGLY DISAGREE

with the physician's decision?

Title: NURSE ATTITUDES ON SEXUAL COUNSELING AS A NURSING RESPONSIBILITY

Author: Green, Mary

Variable: This questionnaire was designed to measure sex attitudes, background in sex education, ability to discuss sex matters with others, and openmindedness regarding sexual counseling as a nursing responsibility.

Description:

Nature and Content: This is a self-administered, 35-item instrument designed to determine whether or not registered nurse and licensed practical nurse respondents have the kind of information and attitudinal framework which would make it possible for them to be effective nurse sexual counselors.

The items are divided into five categories—four of which contain multiple-response types of questions and one which contains true-false questions. The categories and their contents are as follows: (1) demographic data—4 items, (2) background in sex education—6 items, (3) ability to discuss sexual matters with others—4 items, (4) attitudes toward sexual counseling as a nursing responsibility—3 items, and (5) sexual attitudes—18 items.

Administration and Scoring: No special provisions are required for administration, and approximately 20 minutes are required to complete the questionnaire. Instructions for completing the questionnaire are printed on the instrument.

No special scoring procedure has been developed.

Development:

Rationale: No underlying theoretical rationale was identified by the author. Her experience with the sexual adjustment difficulties of patients on a cancer research unit prompted her attention to this neglected aspect of health care.

Source of Items: The author's professional experience and a review of the literature provided the items.

Procedure for Development: The author reviewed the literature to identify desirable qualities for a nurse sexual counselor. Four qualities were identified, i.e., tolerant attitudes toward sex, a broad background in sex education, ability to discuss sexual matters with others, and an openminded attitude toward sexual counseling as a nursing responsibility. With these areas as a frame of reference, the author developed a draft of the instrument, conducted a small pilot study, and then, based upon the results of the pilot study, rewrote some of the items.

Reliability and Validity: To establish the instrument's reliability, it was administered twice to a group of 43 senior baccalaureate degree nursing students. One week intervened between the two administrations. The level of agreement of answers between the first and second administration ranged from 0.7 to 1.0.

The instrument was reviewed by the director of a cancer research unit, a professor of psychiatry, the director of nursing of a State cancer hospital, and an associate professor of community health and medical practice for validity.

Use in Research: Green's (1975) development and use of the instrument with 50 nurses on the staffs of a cancer research center and a State cancer center are described in the reference cited below.

Comments: Because of the complexity of the variables being measured by this instrument, it would perhaps be better to address each of the four with a separate instrument. The items in Green's instrument could provide a useful initial starting point for the development of an instrument which could be used with all health care personnel. However, the following points need psychometric attention: (1) The variables should be conceptually defined more clearly and operational definitions specified. (2) The wording of some items needs to be refined. For example, item 25 reads "Abortions may be done when there is strong likelihood of the baby being malformed"; changing the item to read "Abortions may be done only . . . ." would strengthen the item. (3) The "True-False" response choices provided for the attitude items are inappropriate and should be replaced with a Likert-type response scale to indicate the respondent's degree of agreement or disagreement with the statement.

References:

Green, Mary. *A survey on sexual counseling as a nursing responsibility.* Unpublished manuscript, Cancer Research Center, Columbia, Missouri, 1975.

Source of Information:

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Instrument Copyright: None.

Green, Mary

NURSE ATTITUDES ON SEXUAL COUNSELING AS A NURSING RESPONSIBILITY

Instructions: Answer each question carefully. Please make sure you do not skip any questions. To indicate your answers, circle the letter beside the response you wish to indicate. In the case of the True-False questions, circle the entire word True or False beside each statement to indicate your response. Please do not mark in the left margin beyond the line.

1. Age:
    a. 25 or less
    b. 26-30
    c. 31-35
    d. 36-40
    e. 41-50
    f. 51 or over

2. Marital status:
    a. married
    b. never married
    c. divorced or separated
    d. widowed

3. Childhood religious background:
    a. Protestant
    b. Catholic
    c. Jewish
    d. other

4. Educational background: Circle all appropriate responses.
    a. LPN
    b. RN
    c. diploma graduate
    d. associate degree
    e. baccalaureate
    f. additional college degree(s)
    g. college credits beyond basic nursing program

5. From childhood up to the present how have you received information on menstruation? Circle all appropriate responses.
    a. from discussion with mother
    b. from discussion with father
    c. mother gave me reading material on menstruation
    d. father gave me reading material on menstruation
    e. peers
    f. grade school or high school classes—teachers
    g. reading on my own
    h. from an adult other than parents or teachers
    i. church
    j. sex partner

6. From childhood up to the present how have you received information on reproduction? Circle all appropriate responses.
   a. from discussion with mother
   b. from discussion with father
   c. mother gave me reading material on reproduction
   d. father gave me reading material on reproduction
   e. peers
   f. grade school or high school classes-teachers
   g. reading on my own
   h. from adult other than parents or teachers
   i. church
   j. sex partner

7. From childhood up to the present how have you received information on sexual behavior? Circle all appropriate responses.
   a. from discussion with mother
   b. from discussion with father
   c. mother gave me reading material on sexual behavior
   d. father gave me reading material on sexual behavior
   e. peers
   f. grade school or high school classes-teachers
   g. reading on my own
   h. from an adult other than parents or teachers
   i. church
   j. sex partner

8. Did your school of nursing teach any information regarding any of the following subjects? Circle all appropriate responses.
   a. normal sexual behavior
   b. abnormal sexual behavior
   c. sexual behavior in relation to any disease or physical condition
   d. concepts of sexuality
   e. contraception
   f. reproductive processes

9. Where have you attended formal or informal classes regarding sexual behavior and sexuality? Circle all appropriate responses.
   a. I have never attended such classes
   b. school of nursing
   c. college
   d. workshops, seminars, or conventions
   e. church, Sunday school, or youth group
   f. high school
   g. junior high school
   h. grade school
   i. girl scouts, camp fire girls, or other girls' clubs

10. How much knowledge did you have of menstruation before your first menstrual period? Circle one answer only.
   a. none
   b. insufficient amount of knowledge
   c. sufficient amount of knowledge

11. Have you ever been asked questions regarding sexual behavior by patients? Include all patients, not just cancer patients. Circle one answer only.
    a. never
    b. seldom
    c. frequently
    d. often

12. Have you ever answered a patient's questions regarding contraception? Include all patients, not just cancer patients. Circle one answer only.
    a. never
    b. seldom
    c. frequently
    d. often

13. With whom have you discussed sexual behavior? Circle all appropriate responses.
    a. friends
    b. sex partner
    c. your own children
    d. OB-GYN doctor
    e. doctor other than OB-GYN doctor
    f. parents
    g. clergy
    h. someone else
    i. no one

14. With whom have you discussed contraception? Circle all appropriate responses.
    a. friends
    b. sex partner
    c. your own children
    d. OB-GYN doctor
    e. doctor other than OB-GYN doctor
    f. parents
    g. clergy
    h. someone else
    i. no one

15. In general, do you see sexual counseling within the realm of any of the following professionals? Circle all appropriate responses.
    a. physicians
    b. nurses
    c. psychiatrists or psychologists
    d. social workers
    e. clergy
    f. none of the above

16. How do you think you would feel about asking patients about their sexual problems? Circle one answer only.
    a. at ease
    b. somewhat apprehensive
    c. apprehensive
    d. too apprehensive to try

17. Have you ever wondered about the effects of illness on any of your patients' sexual functioning? Include all patients, not just cancer patients. Circle one answer only.
    a. never
    b. seldom
    c. frequently
    d. often

18. True False Intercourse among non-married adults is acceptable if they are engaged or have plans to marry.

19. True False Abortion may be done in cases of rape or incest.

20. True False Masturbation is normal behavior for either sex at any age, whether married or single.

21. True False Homosexuality should be considered a form of mental illness.

22. True False Oral-genital sex play should be considered a form of sexual deviancy.

23. True False Intercourse among non-married adults is acceptable behavior if they are in love.

24. True False Masturbation is acceptable behavior for unmarried adults who have no other means of sexual gratification.

25. True False Abortion may be done when there is strong likelihood of the baby being malformed.

26. True False Homosexual behavior is immoral.

27. True False I am against abortion under any circumstances.

28. True False Intercourse between consenting non-married adults is acceptable behavior.

29. True False Masturbation is normal behavior for male adolescents.

30. True False Intercourse among non-married adults is wrong under any circumstances.

31. True False Homosexual behavior should be a criminal offense.

32. True False Masturbation may lead to mental illness.

33. True False Oral-genital sex is acceptable behavior.

34. True False Abortion should be the decision solely of the woman.

35. True False Homosexual behavior is acceptable behavior between consenting adults.

Title: DECISION SCALE (**Note:** There are two versions of this instrument—a 34-item version, and a 6-item Guttman Scale.)

Author: Guilbert, Evelyn Kelly

Variable: The willingness of health care personnel in psychiatric patient settings to allocate decisionmaking to patients is the variable under study.

Description:

Nature and Content: The longer version of the instrument consists of descriptions of 34 situations, each of which is a simple type of dilemma involving either a single patient or a group of patients. Each dilemma requires that a decision be made by someone. Thirty of the situations are ones in which experts agree that the decision should be made by the patient. The other four are filler items. Most of the 30 involve a choice situation in which one action taken immediately will prohibit another action later or will probably result in criticism of the staff by the patient's family.

A short version of the instrument, referred to as the Guttman Scale consists of four items from the original instrument and two filler items which were added to reduce the possibility of a respondent developing a set pattern of answering.

Administration and Scoring: The instruments are self-administered, and directions precede the first item on each version. No estimates of the time required for completion of either version were provided.

For the longer version, items number 5, 14, 22, and 29 are not scored; they are filler items, for these are judged to require a decision by someone other than the patient. In the Guttman Scale, items three and four are considered filler items and are not scored.

For the other items on both versions of the instrument, a value of 1 is assigned if the respondent has indicated that the patient should make the decision, and zero value is assigned if someone other than the patient has been indicated as the one who should make the decision.

For the longer version, scores may range from 0 to 30; for the Guttman Scale version, scores may range from 0 to 4.

Development:

Rationale: The instruments were developed as a part of a larger study to investigate the relationship between the willingness of health care personnel in psychiatric hospitals to permit patients to make their own decisions and the feelings of powerlessness of the health care personnel. The instruments are derived from theories of therapeutic practice that place emphasis on promoting independent behavior, including appropriate decisionmaking in psychiatric patients.

Source of Items: The descriptions of the situations were based upon the author's professional experience as a nurse in a variety of psychiatric care settings.

Procedure for Development: The description of the situations were submitted to an expert panel consisting of five judges—two staff nurses, one head nurse, one supervisor, and one clinical specialist employed in a psychiatric facility. The judges evaluated each situation and indicated for each who should make the decision. To be included in the final version of the 34-item instrument, all 5 members of the panel had to agree on who should make the decision.

From the 34-item scale, the author refined and developed the Guttman Scale version of the instrument.

Reliability and Validity: The 34-item version was completed by 140 subjects. The split-half reliability, corrected for full length by the Spearman-Brown prophecy formula, was 0.85.

Test-retest reliability of the Guttman Scale version administered to 52 graduate nurses with an intervening period of 1 week was 0.81.

The content validity of both versions was established by the expert panel review described above.

The correlations between the Guttman Scale version and the Adorno Authoritarianism Scale (California F Scale) and the Crowne Marlowe Social Desirability Scale were −0.38 and −0.31, respectively. These correlations indicate some degree of construct validity for the scale, as does the fact that graduate nurses in a nursing education program that emphasized patient autonomy scored significantly higher on the scale than did nursing assistants (aides, orderlies, and psychiatric technicians).

Use in Research: Guilbert's development and use of the instruments are described in her references cited below.

Comments: The situations described in the instruments are ingenious and real. The 34-item version may prove to be very time-consuming, and its reading load might prove difficult for persons with a limited educational background. The Guttman Scale version circumvents this problem. The author is continuing to work on the scales to strengthen their psychometric properties. The instruments appear to have potential for research on other correlates of the same variable.

References:

Adorno, T. W. *The authoritarian personality.* New York: Harpers Row, 1950.

Crowne, D., and Marlowe, D. Social desirability and response to perceived situational demands. *Journal of Consulting Psychology,* 1961, *25*, 109–115.

Guilbert, Evelyn Kelly. *A study of the relationship between alienation and decision making.* Unpublished master's thesis, University of California at Los Angeles, 1970.

______. *On the views of nursing personnel regarding psychiatric patients making decisions: A pilot study.* Unpublished manuscript, 1972.

Source of Information:

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Instrument Copyright: Evelyn K. Guilbert, R.N., M.S.

Guilbert, Evelyn Kelly

DECISION SCALE

On the next few pages you will find a number of situations described. Each situation is concerned with an interaction between a psychiatric patient and a member of the nursing staff. You are asked to consider yourself as the nurse present in each of these situations.

In each situation you are asked who, in your opinion, should make the necessary decision about the specific matter described. THERE ARE NO "RIGHT" OR "WRONG" ANSWERS. Please read each situation carefully and indicate who you honestly feel should make the required decision.

It is quite possible that you may feel you would like more information about some of the situations. However, it is important to the study that you do not assume any details about the situation except those which you are given. Please base your opinion only on the information given.

For the purpose of this study it is important that every question be answered. PLEASE DO NOT OMIT ANY.

For each situation limit your answer to only one person to make the required decision.

(01) Mr. X. has been a heavy chain smoker for many years, but has now developed a severe cough. His doctor has written an order limiting him to not more than ten cigarettes per day. Yesterday Mr. X. asked for and was given his ten cigarettes in the morning. He smoked them all within one hour, and he was very unhappy for the remainder of the day. Today Mr. X. has again asked you for his cigarettes. The decision must be made whether Mr. X. will receive the ten cigarettes at one time or will receive them one at a time spaced at intervals throughout the day. Who should make the decision?

_____ Mr. X., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(02) Mr. A. requires some assistance with his personal hygiene and dressing. Today his family will be coming to visit; they are very particular about his personal appearance and complain when they feel that he doesn't look neat. You have been assigned to help him get ready. In his locker you find two clean sets of clothing; one is fairly new and the other is much older and quite faded. When you start to get the newer set of clothes for Mr. A. to put on, he states he would rather wear the other. Who should decide which set of clothes Mr. A. will wear for the visit with his family?

_____ Mr. A., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(03) You have been assigned to accompany Mr. Y. to the hospital canteen so that he may purchase a new shirt. Mr. Y. has $8.00; he will not receive any more funds for at least a week. The canteen has two shirts in his size; one sells for $5.00 and the other for $8.00. Mr. Y. says he wishes to purchase the $8.00 shirt. However, this would mean that he will have no money for cigarettes and other incidental items for at least a week, and you have explained this to him. Who should decide which shirt Mr. Y. may purchase?

_____ Mr. Y., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(04) The doctor has written an order permitting Mr. C. to have an unaccompanied grounds pass for one hour each morning and one hour each afternoon; the remainder of the day Mr. C. is restricted to the ward. Late this afternoon Mr. C.'s family is coming to visit and is bringing a picnic supper so that they may all have supper together with Mr. C. on the hospital grounds. Mr. C. is aware of these plans. He returned from his morning grounds pass and had lunch. Shorly after that he approaches you and requests his afternoon pass. It is several hours before his family will arrive; if he uses the pass now, he will not be able to go with his family when they arrive. Who should decide whether or not Mr. C. will take his pass now or wait until his family comes with the picnic supper?

_____ Mr. C., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(05) Mr. R. was admitted to your ward two days ago following a serious suicidal attempt. He is still on "S" status and appears very depressed. His brother has just arrived on the ward and has asked you for permission to take Mr. R. off the station to see his father who is in the hospital. The father is seriously ill and is not expected to recover; he has been asking constantly to see his son, and Mr. R. is anxious to go visit his father. Who should decide whether or not Mr. R. will leave the hospital to go see his father?

_____ Mr. R., the patient.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(06) Mr. N. has recently returned to your ward from the medical service. He is still on bed rest except for an order permitting him to sit up in a wheelchair for one hour twice a day. This morning Mr. N. sat up in the chair; now, several hours later, he has asked you to help him out of bed again. Each evening Mr. N.'s wife comes to visit, and she usually takes him to the lobby in a wheelchair to visit with his children. It is about three hours before Mrs. N. will arrive for her visit. If Mr. N. gets up now, he will not be able to sit up again when his wife comes. You know that this will present a problem for Mrs. N. since she cannot leave her children in the lobby alone and will have to return to them. Mr. N. will be quite unhappy if his wife cannot stay and if he cannot visit with his children. Who should decide whether Mr. N. gets out of bed now or waits until his wife comes?

_____ Mr. N., the patient.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(07) You are sitting in the day room when two patients, Mr. P. and Mr. S., become involved in an argument over which television program will be turned on. There are several other patients present in the room, but none of them express any preference for a particular television program. After arguing for a few minutes, Mr. P. and Mr. S. approach you to ask you which program should be allowed. Who should decide which program the patients will watch?

_____ Mr. P. and Mr. S., the patients.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(08) Mr. D. is a twenty-one year old man on your ward who became ill and was admitted to the hospital during the latter part of his second year at college. For the first few weeks after his admission he rarely spoke to anyone. However, recently he has been much improved and the doctor has told him he may be discharged as soon as he feels he is ready to leave. For the past few days Mr. D. has sought you out and talked to you at length about the problems he has at home. He has told you that his parents are very dominating and have always treated him as if he were a very young child making him account for his whereabouts at all times. Although Mr. D. states he enjoys his college work and was doing well, he began to feel anxious and depressed because of his desire to be more independent which was creating problems with his parents. Mr. D. feels that he could continue his college work if he could live away from home. Since he has been able to obtain a scholarship and has been working part time, he can manage this financially without the aid of his parents. However, Mr. D. has been having difficulty deciding whether or not to make this break with his parents; he has discussed this with his doctor at length. This morning Mr. D. contacted the college

and was told that a vacancy is available in the men's dormitory, but that he must decide today whether or not he wants it; otherwise, the vacancy will be filled by another student. Mr. D. has now approached you and asked you whether or not he should take the room which is available in the dormitory. Who should decide whether or not Mr. D. should take the room?

____ Mr. D., the patient.
____ You, the nurse.
____ Other. (Specify who ______________)

(09) The doctor has granted Mr. M. an unaccompanied weekend pass. Ordinarily Mr. M.'s parents come by late Friday evening to drive him home. However, shortly after noon today, Mr. M.'s mother phoned to tell him that, because her sister had arrived with her family the evening before for a visit, they are very busy and cannot come by to drive him home. Mr. M. feels that his mother does not want him to come home this weekend, since she spent considerable time telling him how crowded the house is and how busy she will be with the visiting relatives. However, when he asked her, his mother told him he could come home if he wanted to. Mr. M. has now approached you and asked whether or not he should take the weekend pass, and if he does go on pass, should he go home or spend this weekend some place else. Who should decide whether or not Mr. M. should go on his weekend pass?

____ Mr. M., the patient.
____ You, the nurse.
____ Other. (Specify who ______________)

(10) In the situation just above (number 09), if Mr. M. does go on pass, who should decide whether he should go home or go some place else for the weekend?

____ Mr. M., the patient.
____ You, the nurse.
____ Other. (Specify who ______________)

(11) Recently on your ward there has been a serious problem involving one of the patients taking items from the lockers of other patients. One of the patients, Mr. B., complains loudly to you whenever he finds some item missing from his locker. All of the patients have been provided with keys for their lockers and have been encouraged to keep their lockers locked. However, Mr. B. consistently leaves his locker unlocked; he states it is too much trouble to carry around the key and to lock and unlock the locker every time he wants something out of it. Someone has suggested that it might be helpful if Mr. B. kept his key in the nursing office; this will mean that he will have to undergo the inconvenience of having one of the personnel let him into his locker each time he wants something from it, but should take care of the problem of items being taken from his locker. Who should decide whether or not Mr. B. will keep his own key to his locker or whether he will leave it in the nursing office?

____ Mr. B., the patient.
____ You, the nurse.
____ Other. (Specify who ______________)

(12) In the situation just described (number 11), if Mr. B. does keep his own key to his locker, who should decide whether or not he will keep his locker locked?

_____ Mr. B., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(13) The recreation department has arranged for the patients on your ward to have a barbecue this evening. The dietician has notified the ward that no food will be available from the dining room for the patients, since it is expected that all patients will attend the barbecue. About a half hour before the group plans to leave for the picnic grounds for the outing, Mr. T. approaches you and tells you that he does not wish to go. Mr. T. has a full day privilege card; however, since he is completely without funds, he will not have any supper if he does not go with the group to the barbecue. Who should decide whether or not Mr. T. will go with the group?

_____ Mr. T., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(14) Mr. S. has recently been readmitted to your ward; he had only been out of the hospital for one week when his wife brought him back stating that he had been acting "strangely" since he has been at home. Since he has been back in the hospital, Mr. S.'s behavior has been bizarre and unpredictable; he has required constant supervision around the clock. (For example, he constantly removes his clothing, running about the ward nude; he speaks in an unintelligible "gibberish" and laughs frequently for no apparent reason; he refuses to eat the food served to him, but constantly picks up pieces of trash off the floor, from ash trays, etc., and tries to eat these.) This morning Mrs. S., the patient's wife, has approached you and asked to see her husband for the purpose of having him sign some papers which will enable her to borrow some money she needs to meet an emergency at home. Who should decide whether or not Mrs. S. may see her husband and get his signature on the papers?

_____ Mr. S., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(15) Mr. W. has just been hired to work for a company which is located some distance from the hospital. Tomorrow will be his first day on the job. It is now 11:30PM and Mr. W. is still sitting in the day room reading a book. You know that, because of difficulties with transportation, Mr. W. will have to get up at 4:30AM in order to get to work on time. You have suggested to him that he should go on to bed, but he states that he wishes to finish the book he is reading. Who should decide whether or not Mr. W. should go on to bed now or continue reading?

_____ Mr. W., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(16) The doctor has written an order that Mr. F. may have an unaccompanied weekend pass every weekend, provided that Mr. F. has attended his work assignment every day and performed his assignment satisfactorily. He has made Mr. F. aware of this conditional arrangement for a pass, and has told Mr. F. that the pass will be automatically canceled if he fails to attend any scheduled work session. This weekend Mr. F.'s wife is coming from out of town to visit him, and he has been looking forward to this pass for several weeks. Mr. F. has been attending his assignment regularly. However, after lunch on Friday he approaches you and states that he has other things to do and is not going on his assignment that afternoon. This will mean that his pass for the weekend will be canceled. Who should decide whether or not Mr. F. should go on his work assignment that afternoon?

_____ Mr. F., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(17) Since the staff feel that Mr. E. will be ready for discharge very soon, the doctor has permitted Mr. E. to keep and take his own medication. The doctor instructed Mr. E. to take the medication only when he feels that he really needs it. Just now you passed by Mr. E.'s room and found him pacing back and forth; he appeared upset. When you stop in to talk with him he tells you that he feels nervous, and wonders whether or not he should take some of the medicine. Who should decide whether or not Mr. E. takes the medicine at this time?

_____ Mr. E., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(18) For weeks now Mr. R. has been looking forward to seeing a professional football game which the recreation department has arranged for a small group of patients to attend. The group is scheduled to leave immediately after lunch. About 10:00AM Mr. R. receives a telephone call from his parents telling him that they are arriving for a visit and will be there about 2:00PM. Because of the distance they must travel, they do not manage to come often. After talking with his parents, Mr. R. approaches you and asks you whether he should go ahead and attend the game which he has looked forward to for so long, or whether he should remain there and see his parents. Who should make the decision whether or not Mr. R. should attend the game?

_____ Mr. R., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(19) Mr. V. has worked on the same assignment for several weeks. The therapist reports that he is doing excellent work, and Mr. V. has repeatedly stated how much he enjoys the work he is doing. However, about ten days ago a patient from another ward was assigned to the same work area; he and Mr. V. have been having frequent disagreements about the way the job should be handled. This morning Mr. V. approaches you and discusses the problems he has been having with the other patient. He asks you whether he should talk to the therapist about the problem and ask to have someone else assigned to work with him or whether he should ask the doctor to change his assignment

to another area. Who should decide whether or not Mr. V. should ask the therapist to assign someone else to work with him?

_____ Mr. V., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(20) In the situation just above (number 19), if Mr. V. does ask the therapist to assign someone else to work with him but finds out this is not possible, who should decide whether or not Mr. V. should ask his doctor to change his assignment to another area?

_____ Mr. V., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(21) Mr. J. is a forty-four year old patient who has been in the hospital for approximately three months; this is his first hospitalization. The staff now feel that Mr. J. is ready for discharge. For the past seventeen years Mr. J. has been employed as an accountant by a small insurance company. He is well liked by his employers, and they have held his job open for him while he has been in the hospital. About a week ago Mr. J. received an offer for another position from a large bank located in another city. The new position would give him a sizable increase in salary and would offer considerably more opportunity for advancement. However, this would necessitate his moving his family to another city and would involve his adjustment to the new working conditions. The bank has asked that he contact them no later than tomorrow morning to give them an answer about whether or not he will accept the job. During the afternoon Mr. J. approaches you and discusses the situation with you. He states that he feels the new job is a wonderful opportunity, but that he is somewhat concerned about making the change so soon after his recent illness. He asks you whether or not accepting the new position would be the best thing for him to do. Who should decide whether or not Mr. J. should accept this new job?

_____ Mr. J., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(22) Following visiting hours today, Mr. B. approached you and showed you some small white tablets which his mother had brought to him. The medicine bottle has no label on it. He states he has been taking these tablets at home to ease the pain of the severe headaches which he frequently gets; he states that nothing else will help him. The tablets were given to him by a doctor in another city. Mr. B. asks you if he may keep the tablets with him since, in order for them to help him, he must take them as soon as he feels one of his headaches coming on. Who should decide whether or not Mr. B. shall keep the tablets with him?

_____ Mr. B., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(23) Mr. K. is assigned to a single bedroom on your ward. The patient in the next room snores very loudly at night, and Mr. K. has difficulty sleeping. He complains to you every day about this. The only other available vacant bed at this time is in the large dormitory, and Mr. K. has been told he may move to this bed if he would prefer it. However, Mr. K. likes the privacy of the single bed room and is undecided about whether or not he should move to the dormitory. A new patient is in the process of being admitted so Mr. K. must decide now whether or not he wishes to move. He approaches you and asks you whether or not he should take the dormitory bed. Who should make this decision?

_____ Mr. K., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(24) Mr. G. is a single, forty year old patient on your ward whose only income is a small disability pension. Mr. G.'s mother is fifty-eight years old and in good health. Since his mother doesn't work, Mr. G. has for many years been sending all but a few dollars of his pension to his mother each month. None of his brothers or sisters contribute any money to their mother's support. Although Mr. G. has been hospitalized for several years, he has improved a great deal recently and the staff feel he is nearing the time when he can be discharged. Mr. G. does not wish to return to live with his mother. However, in order to manage on his own he will need to keep his entire pension each month and will be unable to send any to his mother. The social worker has seen Mr. G.'s mother on several occasions and explained to her how she may go about receiving financial assistance from other sources, but she has been unwilling to do so. She insists that her son, Mr. G., should continue to support her. Mr. G. is very anxious to leave the hospital, try to find a job, and make it on his own. However, he is reluctant to discontinue sending the major portion of his pension to his mother. This afternoon he has been talking with you about the problem; his mother is coming for a visit this evening and because of the nearness of his discharge plans, he wants to settle the matter at that time. Mr. G. asks you whether or not he should tell his mother that he will not be able to continue the financial assistance he has been giving to her. Who should make this decision?

_____ Mr. G., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(25) The patients on your ward have access to a room where they may make their own coffee; they enjoy being able to have coffee whenever they like. In order for them to keep this room, the patients must assume full responsibility for keeping the room clean and neat. Recently the patients have been warned that the condition of the room is not satisfactory and that unless an immediate improvement is noted, the room will be locked. All of the patients are cooperative about keeping the room neat except for Mr. L. The patients do not want to lose their use of the coffee room, but they are reluctant to restrict Mr. L.'s use of the room in any way. This morning a group of patients approach you to ask what should be done. Who should decide how the problem with Mr. L. should be handled?

_____ The patients.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(26) Mr. H. is a thirty-six year old patient on your ward who, prior to his admission to the hospital, was an accomplished musician. His parents have brought his instrument to the hospital for him so that he may continue his daily practice sessions. However, Mr. H. enjoys the work assignment he has been doing as well as the other activities which are available, and rarely practices. His parents visit him each week. When they find out that Mr. H. is not practicing regularly, they become quite angry and very loudly criticize you and the other members of the nursing staff; they insist that you must see that Mr. H. continues his daily practice sessions since they feel that this is most important to his future. Who should decide when Mr. H. will practice his musical instrument?

_____ Mr. H., the patient.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(27) At a recent session of the ward government meeting the patients voted that they wanted to decorate their ward for the coming Christmas holidays. Some of the decorations they have been making themselves, and they have taken up a small collection to enable them to purchase others. However, now that the time has come for them to actually make the purchases, the patients are divided on how they should spend the money. Some of them are still in favor of purchasing decorations, but others feel that they have made enough decorations and prefer to spend the money on refreshments for a ward Christmas party. They seem to be fairly evenly divided and have not yet been able to settle on which they should buy. This afternoon two of the patients have approached you and told you that they have been unable to reach a compromise. They ask you whether they should buy the decorations or buy refreshments for a party. Who should decide which purchase should be made?

_____ The patients.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(28) For the past three days Mr. I. has complained of not feeling well. He was seen by the ward doctor and although the doctor found nothing specifically wrong with him, the doctor wrote an order that Mr. I. may remain off his assignment and stay in bed if he doesn't feel well. This afternoon, after everyone else has left the ward, Mr. I. approaches you and tells you that he feels much better. He asks you whether or not he should go on to his assignment. Who should decide whether Mr. I. should remain on the ward or return to his assignment?

_____ Mr. I., the patient.
_____ You, the nurse.
_____ Other. (Specify who ______________)

(29) Mr. N. has been a patient on your ward for some time and the staff felt that he would soon be ready for discharge. However, while on pass last weekend, Mr. N. had suddenly begun to scream loudly and had struck several people standing nearby, causing rather severe injuries to two of them. Since his return to the hospital, Mr. N. has been considered assaultive and is still carried on "A" status even though no further episodes of this behavior have occurred. There is an order on Mr. N.'s chart which states that he is not to be permitted to leave the ward unless he is accompanied by two nursing assistants. This evening there is a special program being held at the chapel, and Mr. N. had been working hard helping with preparations for the program prior to last weekend's episode. He has looked forward for several weeks to his part on the program and is very disappointed that he will be unable to attend since there are not enough

personnel available for the nursing assistants to accompany him. The chaplain has just come on the ward and has asked you if he may take Mr. N. to the chapel for the service; he agrees to assume full responsibility for getting Mr. N. to the chapel and returning him to the ward. Who should decide whether or not Mr. N. will be permitted to go to the service with the chaplain?

_____ Mr. N., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(30) Mr. O. is an alcoholic patient who has upon numerous occasions in the past started drinking when he went on pass and failed to return on time. For a long period Mr. O.'s doctor did not allow him to have any passes. However, last weekend he was permitted a day pass for Saturday and one for Sunday and returned on time. This week the doctor has again written an order that Mr. O. may have two one-day passes over the weekend. The doctor has told Mr. O. that, if he fails to return on time for any reason, he will be restricted to the locked ward and further pass requests will be denied. Late Friday evening Mr. O. receives a telephone call from a former employer in another city. He states that he has a job opening for Mr. O., but that he must see him this weekend in order to settle the details. If Mr. O. cannot make it, the job will be given to another man. Because of the distance involved, Mr. O. cannot make it there and back for the interview in one day, but could make it with a pass permitting him to leave early Saturday morning and return Sunday night. Mr. O.'s doctor has left the hospital and is out of town for the weekend; he cannot be reached by phone. Because of the patient's past history and since he does not know Mr. O. personally, the doctor who is in charge over the weekend is reluctant to change the original pass order. Mr. O. approaches you and discusses the problem. He very much wants to see about the job since he feels he can handle the work, and when he worked for this same employer before, he was able to remain sober for many years. Mr. O. feels that his own doctor would give him the pass if he knew the circumstances. However, he is not sure, and is reluctant to take the chance and perhaps have to return to the locked ward and do without further passes. Mr. O. asks you whether or not he should go for the interview. Who should decide whether or not Mr. O. should go?

_____ Mr. O., the patient.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(31) For several weeks the patients on your ward have been making plans for a party. They have made some decorations, collected money and arranged for the refreshments and entertainment, and have invited a group of ladies from one of the female wards to be their guests. On the afternoon of the party they discover that the patient who had been appointed to keep the money which had been collected and to make the arrangements for the refreshments has left the hospital with their money. A group of patients approach you and ask whether they should go ahead with the party even though they have no refreshments or whether they should cancel the party. Who should make this decision?

_____ The patients.
_____ You, the nurse.
_____ Other. (Specify who _______________)

(32) In the situation just above (number 31), if the patients do not have the party, the ladies who have been invited as guests will have to be informed. Who should decide how this matter will be handled?

_____ The patients.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(33) Mr. J. has been hospitalized for many years. For the past several months he has shown steady improvement. Mr. J. has no relatives in this area. He has rarely been off the hospital grounds except for an occasional outing with groups of patients from the hospital. For the past several weeks a volunteer has been visiting Mr. J. each week. He enjoys these visits very much. The volunteer has offered to drive Mr. J. to a nearby shopping center for lunch and to allow him to purchase some items he needs provided the doctor will give him a pass. Mr. J. is quite anxious to go, but he is reluctant to ask the doctor for a pass. Tomorrow is the day the volunteer is coming to visit. This afternoon Mr. J. approaches you and asks you whether or not he should ask the doctor for the pass. Who should decide whether or not Mr. J. should ask for a pass?

_____ Mr. J., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

(34) Mr. Z.'s mother lives some distance from the hospital. She goes to considerable trouble to arrange transportation in order to visit her son, since she cannot drive herself. Whenever she comes for a visit, Mr. Z.'s mother becomes very angry with the personnel if she cannot see her son at once. Mr. Z. finds these visits with his mother very upsetting and does not like to visit with her. This afternoon, after everyone else has left the ward except you and Mr. Z., and two other patients, Mr. Z. approaches you and discusses how upset he becomes when his mother visits. He asks you whether or not he should see his mother when she arrives this afternoon. Who should decide whether or not Mr. Z. should visit with his mother?

_____ Mr. Z., the patient.
_____ You, the nurse.
_____ Other. (Specify who _____________)

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Guilbert, Evelyn Kelly

DECISION SCALE

On the next few pages you will find a number of situations described. Each situation is concerned with an interaction between a psychiatric patient and a member of the nursing staff. You are asked to consider yourself as the nurse present in each of these situations.

In each situation you are asked who, in your opinion, should make the necessary decision about the specific matter described. THERE ARE NO "RIGHT" OR "WRONG" ANSWERS. Please read each situation carefully and indicate who you honestly feel should make the required decision.

It is quite possible that you may feel you would like more information about some of the situations. However, it is important to the study that you do not assume any details about the situation except those which you are given. Please base your opinion only on the information given.

For the purpose of this study it is important that every question be answered. PLEASE DO NOT OMIT ANY.

For each situation limit your answer to only one person to make the required decision.

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1. For the past three days Mr. I. has complained of not feeling well. He was seen by the ward doctor and although the doctor found nothing specifically wrong with him, the doctor wrote an order that Mr. I. may remain off his assignment and stay in bed if he doesn't feel well. This afternoon, after everyone else has left the ward, Mr. I. approaches you and tells you that he feels much better. He asks you whether or not he should go on his assignment. Who should decide whether Mr. I. should remain on the ward or return to his assignment?

   _____ Mr. I., the patient.
   _____ You, the nurse.
   _____ Other. (SPECIFY WHO _______________)

2. Mr. Q. has been hospitalized for many years. For the past several months he has shown steady improvement. Mr. Q. has no relatives in this area. He has rarely been off the hospital grounds except for an occasional outing with groups of patients from the hospital. For the past several weeks a volunteer has been visiting Mr. Q. each week. He enjoys these visits very much. The volunteer has offered to drive Mr. Q. to a nearby shopping center for lunch and to allow him to purchase some items he needs provided the doctor will give him a pass. Mr. Q. is quite anxious to go, but he is reluctant to ask the doctor for the pass. Tomorrow is the day the volunteer is coming to visit. This afternoon Mr. Q. approaches you and asks you whether or not he should ask his doctor for the pass. Who should decide whether or not Mr. Q. should ask for a pass?

   _____ Mr. Q., the patient.
   _____ You, the nurse.
   _____ Other. (SPECIFY WHO _______________)

3. Mr. D. is a twenty-one year old man on your ward who became ill and was admitted to the hospital during the latter part of his second year at college. For the first few weeks after his admission he rarely spoke to anyone. However, recently he has been much improved and the doctor has told him he may be discharged as soon as he feels he is ready to leave. For the past few days Mr. D. has sought you out and talked to you at length about the problems he has at home. He has told you that his parents are very dominating and have always treated him as if he were a very young child making him account for his whereabouts at all times. Although Mr. D. states he enjoys his college work and was doing well, he began feel anxious and depressed because of his desire to be more independent which was creating problems with his parents. Mr. D. feels that he could continue his college work if he could live away from home. Since he has been able to obtain a scholarship and has been working part time, he can manage this financially without the aid of his parents. However, Mr. D. has been having difficulty deciding whether or not to make this break with his parents; he has discussed this with his doctor at length. This morning Mr. D. contacted the college and was told that a vacancy is available in the men's dormitory, but that he must decide today whether or not he wants it; otherwise, the vacancy will be filled by another student. Mr. D. has approached you and asked you whether or not he should take the room which is available in the dormitory. Who should decide whether or not Mr. D. should take the room?

_____ Mr. D., the patient.
_____ You, the nurse.
_____ Other. (SPECIFY WHO _______________)

4. Mr. R. was admitted to your ward two days ago following a serious suicidal attempt. He is still on "S" (suicidal) status and appears very depressed. His brother has just arrived on the ward and has asked you for permission to take Mr. R. off the station to see his father who is in the hospital. The father is seriously ill and is not expected to recover; he has been asking to see his son, and Mr. R. is anxious to go visit his father. Who should decide whether or not Mr. R. will leave the hospital to go see his father?

_____ Mr. R., the patient.
_____ You, the nurse.
_____ Other. (SPECIFY WHO _______________)

5. For weeks now Mr. E. has been looking forward to seeing a professional football game which the recreation department has arranged for a small group of patients to attend. The group is scheduled to leave immediately after lunch. About 10:00AM Mr. E. receives a telephone call from his parents telling him that they are arriving for a visit and will be there about 2:00PM. Because of the distance they must travel, they do not manage to come often. After talking with his parents, Mr. E. approaches you and asks you whether he should go ahead and attend the game which he has looked forward to for so long, or whether he should remain there and see his parents. Who should make the decision whether or not Mr. E. should attend the game?

_____ Mr. E., the patient.
_____ You, the nurse.
_____ Other. (SPECIFY WHO _______________)

6. Mr. V. has worked on the same assignment for several weeks. The therapist reports that he is doing excellent work, and Mr. V. has repeatedly stated how much he enjoys the work he is doing. However, about ten days ago a patient from another ward was assigned to the same work area; he and Mr. V. have been having frequent disagreements about the way the job should be handled. Mr. V. has asked the therapist to assign someone else to work with him but found out this is not possible. This morning Mr. V. approaches you and asks you whether or not he should ask the doctor to change his assignment to another area. Who should decide whether or not Mr. V. should ask the doctor for a change of assignment?

_____ Mr. V., the patient.
_____ You, the nurse.
_____ Other. (SPECIFY WHO _____________)

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Instrument Copyright: Evelyn K. Guilbert, R.N., M.S.

Title: HEALTH CARE WORK POWERLESSNESS SCALE (REVISED)

Author: Guilbert, Evelyn Kelly

Variable: The variable is the feeling of powerlessness in health care work settings. Powerlessness is defined as the extent to which the health worker believes that he(she) has little or no control over events relevant to his(her) work situations.

Description:

Nature and Content: This instrument is the second revision of an instrument constructed by Guilbert in 1972. The revised version consists of 14 paired statements, one of which represents control and one of which represents lack of control or powerlessness. The instrument is a forced-choice response, one in which the respondent is asked to endorse one of the pair of statements.

The statements are general in nature and the content is not particularly related to health care settings.

Administration and Scoring: The instrument is simple to administer. The respondent is instructed to check, in each pair, one item which he(she) believes to be most nearly true. The instrument can be self-administered, individually administered, or group administered.

A score of 1 is assigned to each statement checked that represents powerlessness (feelings of lack of control), and a zero is assigned to those that represent control. Scores can range from 0 to 14 with higher scores denoting greater feelings of powerlessness.

Development:

Rationale: The theoretical basis for the instrument is Seeman's (1962) concept of alienation of which powerlessness is one feature. Guilbert theorizes that feelings of powerlessness influence the degree to which psychiatric workers are willing to allocate decisionmaking to patients. Guilbert's view of powerlessness, which appears to be closely related to Rotter's internal-external locus of control, focuses on the extent to which workers think they have or expect to have control or influence on events or decisions in their working situations.

Source of Items: The items were developed by the author and are of the same general design as those used by Seeman (1962).

Procedure for Development: The author developed a scale of nine items which was reviewed by Dr. Melvin Seeman for content validity. The wording of the items was slightly changed and five new items were added. The scale was then submitted to a three-member panel of judges for review. Changes in wording were made as necessary in order to achieve unanimous agreement on the validity of each item.

Reliability and Validity: Content validity has been tentatively established by submitting the items to a panel of expert judges. However, no other types of validity have been established as of this date. Split-half reliability coefficients have been determined for two small groups. In one group, N = 6, the split-half reliability coefficient was 0.72; in the other, N = 15, the reliability coefficient was 0.81. Both groups were extremely heterogeneous in educational backgrounds.

Use in Research: Guilbert has used either the original or first revision of the instrument in the studies cited at the end of this review. As of this date, the present revised edition has not been used in any research study.

Comments: Each revision of the instrument has attempted to improve its psychometric properties. The original version and each revision has been field tested. Further testing needs to be done before it can be used in research. The author plans to continue work on the development of the instrument, and anyone interested in using it should contact her.

References:

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Neal, Arthur G., and Seeman, Melvin. Organizations and powerlessness: A test of the mediation hypothesis. *American Sociological Review*, 1964, *29*, 216–226.

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Guilbert, Evelyn Kelly

HEALTH CARE WORK POWERLESSNESS SCALE (REVISED)

For this section of the study you are asked to select the ONE statement out of each pair of statements which you more strongly believe to be true. Again, it is quite possible in some cases that you may not really agree with either statement in a pair. In these cases please check the one statement which comes closer to expressing the way you feel.

Please check ONLY ONE statement out of each pair. Be sure to check the one which you actually believe to be more nearly true, rather than the one you think you "should" check or the one you would like to be true.

It is important to this study that you choose one statement out of each pair. PLEASE DO NOT OMIT MAKING A CHOICE OUT OF ANY PAIR.

Remember, there are no "right" or "wrong" choices. It is your individual opinion that is important to this study.

---

1. ____ When a person works for a large organization such as this facility, that person has little chance of exerting any real influence on working conditions.
   ____ Even in a large organization such as this facility, the individual can have a real influence on working conditions, if that individual makes her (his) ideas known.

2. ____ The type of treatment program a patient receives is decided by the doctor; there's really very little anyone else can do except go along with it.
   ____ Everyone who works with patients here can have a real influence on what treatment approach will be used.

3. ____ Some people are just lucky and seem to advance in their jobs by simply being in the right place at the right time.
   ____ Many people don't realize how much the cause of their failure to get ahead on their jobs is the result of their own work performance.

4. ____ It doesn't do much good to try to think of ways to improve conditions at work; you usually can't try new ideas anyway.
   ____ If you have a good idea about some way to improve conditions at work, you can usually get the backing you need to try it.

5. ____ It does little good to plan one's career too far ahead; some people get the breaks and some don't.
   ____ People are better off if they plan their careers and set goals for themselves rather than trusting to fate.

6. ____ Individuals can influence in established rules at this facility, if they make their own needs known.
   ____ Established rules at this facility can't be changed for an individual's needs or problems.

7. ____ As a member of the treatment team I can have a real influence on the treatment program prescribed for patients.
____ Even though I am considered a member of the treatment team, it's really the doctors who decide what treatment the patient will receive.

8. ____ Whether or not a person gets a raise or promotion in their job depends mostly on luck and knowing the right people; there's really not much the individual can do about it.
____ Whether or not a person gets a raise or promotion on their job depends mostly on whether that individual is well prepared and does a good job.

9. ____ I think people like myself can have an influence on how things are run here.
____ It's rather silly to ask someone like myself to make suggestions about how things should be run here; people seldom pay any attention to them.

10. ____ When decisions are being made at this facility, the opinions of the people affected by that decision do have an effect on what's decided.
____ When decisions are being made at this facility, the opinions of the people affected by them have little influence on what's decided.

11. ____ Offering valid complaints about one's work situation here doesn't seem to do much good.
____ Offering valid complaints about one's work situation here is usually helpful in bringing about needed changes.

12. ____ Persons like myself have little chance of protecting our professional interests in this job when they conflict with those in the positions of power.
____ I feel we have adequate ways of coping with those in the positions of power in this facility and can protect our own professional interests.

13. ____ Employees at this facility can usually participate in making important decisions related to their own work.
____ Individual employees have little opportunity to participate in making important decisions related to their own work.

14. ____ Facility-wide policies are made by those few people in power, and there is not much the individual employee can do about it.
____ The individual employee can usually have an influence on facility-wide policies.

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Title: NURSE PERCEPTIONS OF STRESS

Author: Navin, Helen L.

Variable: Personal subjective and objective stress as perceived by nurses is the variable. The definitions of stress and stressor used by the author are those of Selye (1956). Stress is the state manifested by a specific syndrome which consists of all the nonspecifically induced changes within a biologic system; stressor—that which produces stress.

Description:

Nature and Content: This is a 27-item interview scale which could be self-administered. Along the left side are 17 "subjective" stressors and 10 "objective stressors"; for each of these, the respondent is asked whether or not this particular stressor was experienced last year (response choices are yes or no) and, if so, an estimate of its severity.

If the respondent did experience a particular stressor, it is asked that he(she) numerically rate its severity using a scale of 1 to 6 for a mild stressor, 7 to 13 for a moderate stressor, and 14 to 20 for a severe stressor.

Administration and Scoring: If the scale is to be administered by interview, the interviewer should be one with interview experience who can establish rapport with the subject, and who is familiar with the instrument. The author states that each interview requires approximately 45 minutes.

If the instrument is to be self-administered, no special provisions are necessary, and this reviewer estimates it would require approximately 15–20 minutes for completion.

No information on scoring of the instrument per se was provided.

Development:

Rationale: The instrument was based upon Selye's (1956) theory of stress and was derived from the work of Holmes and Rahe (1967) and Thurlow (1971).

Source of Items: The author adapted some of the items from Holmes and Rahe's Social Readjustment Rating Scale (1967) and supplemented them with items from other literature, her personal and professional experience, and that of her peers.

Procedure for Development: Three steps were involved in the development of the scale:

1. A restated form of Holmes and Rahe's Social Readjustment Rating Questionnaire and Social Readjustment Rating Scale was developed and distributed to nurses in three hospitals on three wards—an intensive care unit (ICU), a medical-surgical unit (Med-Surg), and a geriatrics unit. In each case, the nurse in charge of the unit was interviewed, and copies of the form were left for completion by nurse staff members. The investigator interviewed the nurses on the staff of another unit to discuss their work and the events they perceived as stressful. The investigator interviewed a nurse in middle management who told of the stressors that pertained both to her(him) and the staff as she(he) perceived them. From these steps, a total of 13 responses were received and a total of 139 stressors were listed. After duplications were eliminated, 75 stressors remained.

2. Twenty nurses volunteered to participate in the next step—the 75 stressors were placed on IBM cards with a particular stressor typed at the top of each card. The nurses were asked to rank the cards on a continuum from 1 to 20, with 20 representing the stressor which required the most personal adjustment and 1 being the one which required the least personal adjustment. The stressor "inadequate work area" was arbitrarily given the value of 10 in the subjective stressors, and "marriage" was assigned the value of 10 in the objective category by the author.

3. From step 2, the 17 cards most frequently chosen from a possible 43 became the subjective stressors of the final instrument; the top 10 of the 32 objective stressor cards most frequently chosen became the objective stressors of the final instrument.

Reliability and Validity: The author referred to the reliability and validity of the Holmes and Rahe Scales (1967). However, no data provided for the reliability of her adapted version of it other than "reliability was shown to be accurate for eight factors in the severe category."

Content validity would seem to have been established by the source of the items and the steps used in the development of the instrument.

Use in Research: Navin (1975) developed and used the scale in a study entitled *A Case for the Nurse: Stress Identification or Absenteeism.* A larger study using the instrument is now in progress.

Comments: This scale is still in the early stages of psychometric development. The items and the format of the instrument should be refined; a scoring system should be developed which will provide quantifiable data, and the reliability and construct validity of the instrument should be determined. The author pointed out that voluntary subjects who participated in her pilot study, and persons who volunteer for research projects, especially a project dealing with stress, may, in fact, react to and handle stress differently from nonvolunteers.

References:

Holmes, Thomas, and Rahe, Richard. The social readjustment rating scale. *Journal of Psychosomatic Research*, 1967, *11*, 213–218.

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Selye, Hans. *The stress of life.* New York: McGraw Hill Publishing Company, 1956.

Thurlow, H. J. Illness in relation to life situations and sick-role tendency. *Journal of Psychosomatic Research*, March 1971, *15*, 73–88.

Source of Information:

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Instrument Copyright: None.

Navin, Helen L.
NURSE PERCEPTIONS OF STRESS

STRESS DATA

STRESSORS	EXPERIENCED LAST YEAR		SEVERITY ESTIMATE		
SUBJECTIVE	YES	NO	MILD 1-6	MODERATE 7-13	SEVERE 14-20
Inadequate work area					
Unfair discipline from superior					
Unfair treatment from superiors					
Unwelcome feeling of formed group to newcomer					
Team nursing channels of authority broken					
Threat of losing job					
Friction between unit personnel					
Incompetent staff					
Friction with other services in hospital					
Disrespect from staff under your leadership					
Too much responsibility					
Drs. not responsible for talking to patient or family about impending death					
Noisy work space-nursing station					
Being a middleman (Dr.-Pt., Dr.-Family, Etc.)					
Problems with family members of patient					
Physician reprimand					
Personal sexual difficulties					
OBJECTIVE					
Marriage					
Death of spouse					
Divorce					
Son or daughter leaving home					
Marital separation					
Death of a close family member					
Gain of new family member					
Marital reconciliation					
Death of a close family friend					
Request from supervisor to do illegal task					

Title: PARENT PARTICIPATION ATTITUDE SCALE (PPAS)

Authors: Seidl, Frederick W., and Pillitteri, Adele

Variable: The PPAS was designed to measure the acceptance or rejection by nursing personnel of parent participation in hospital pediatric programs. "Parental participation" refers to a parent's or parents' presence and active involvement in the care of their hospitalized children.

Description:

Nature and Content: The PPAS consists of 24 self-rated Likert items indicating pediatric staff acceptance or rejection of parental involvement in hospital pediatric care programs. A typical item is: "It is generally good practice to allow a parent to accompany his or her child to X-ray." Five possible alternative responses are provided: A=strongly agree, a=mildly agree, un=uncertain, d=mildly disagree, and D=strongly disagree.

An equal number of positive and negative statements are included to avoid the effect of response set.

Administration and Scoring: Instructions accompanying this self-administered instrument state that there are no right or wrong answers. Returns are not signed and subjects are urged to be frank in giving their personal views.

For positive items (acceptance of parent involvement), scores are assigned from 5 (for strongly agree) to 1 (for strongly disagree). For negative items (rejection of parent involvement), the scores are reversed. The resulting ratings are then summed to provide a total score for each individual. A high total score indicates acceptance of parent involvement. Although positively and negatively worded items are randomly distributed throughout the questionnaire, they can be identified by a list provided by the authors.

Development:

Rationale: From the point of view of medicine, child nutrition, hospital administration, and mental health, the involvement of parents in the pediatric care of their children has been, under appropriate conditions, minimally troublesome and maximally beneficial for both the child and the parent. The recent growing interest in parent participation programs has raised the question, "What kinds of reactions from staff might be expected as a result of the initiation of such a program?" (Seidl and Pillitteri, 1967).

Source of Items: An initial list of 32 items was devised by the authors based upon a review of the literature and their professional experience.

Procedure for Development: The initial list was submitted to a panel of three nurse-judges for evaluation on the following criteria: (1) clarity of intent, brevity, and relevance to the object of the attitude—parent participation, and (2) relevance to current nursing theory. Of the 32 items submitted to the panel, 26 were considered acceptable on the basis of 100 percent agreement.

These 26 items were listed in random order and mimeographed for distribution to 231 nursing personnel. After the completed forms were scored, two criterion groups, the highest 33 cases and the lowest 33 cases, were compared (according to a procedure developed by Likert) to determine whether or not the groups differed significantly in their responses to each of the items. All but two of the comparisons produced t-values which indicated that the item discriminated between the high and low scoring groups. These two items were eliminated yielding the 24-item final form.

The sample used for instrument development was 231 nursing personnel at the Children's Hospital of Buffalo, New York. Although detailed sampling information was not provided, the group seems to have been representative of the population for which the instrument is intended. The group was heterogeneous with regard to educational preparation (nurse's aides, licensed practical nurses, and registered nurses), employment status, length of time in nursing, and area of greatest experience before present employment.

Reliability and Validity: The split-half reliability coefficient with the Spearman-Brown correction was 0.37. Content validity was established through the systematic method of item selection and revisions by a panel of nurse judges.

Use in Research: Except for the testing of the scale, it has not been used in any published research. However, the author reported that it has been used in some master's theses (Seidl, 1976).

Comments: Items for the PPAS are lucid and comprehensive. Because the reported Spearman-Brown coefficient is extremely low, further studies of the instrument's internal consistency are urged, as is further attention to its validity.

References:

Seidl, F. W., and Pillitteri, A. Development of an attitude scale on parent participation. *Nursing Research*, 1967, *16*, 71–73.

Seidl, F. W. (personal communication) 1976.

Source of Information:

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Instrument Copyright: Frederick W. Seidl

Seidle, Frederick W., and Pillitteri, Adele

PARENT PARTICIPATION ATTITUDE SCALE (PPAS)

INSTRUCTIONS

In cooperation with the hospital we are studying what nurses think about parent participation in hospital pediatric programs. A lot has been written on this subject in the various journals. Frequently, these articles are not in agreement. We thought it might be a good idea to find out what nurses themselves think.

You can help in the study by passing on your own ideas. Be frank and give your personal views regardless of what others may think. There are no right or wrong answers.

You do not need to give your name. We would, however, like to have you fill out the questions on the last page for research purposes (age, education, etc.).

So as not to use too much of your time, we have a list of ideas which other nurses have contributed. You merely circle the large "A" if you strongly agree, the small "a" if you mildly agree, "un" if you are uncertain or can not make up your mind, the small "d" if you mildly disagree, and the large "D" if you strongly disagree. If you have any ideas which you feel should be included, jot them down at the end. We would appreciate having them.

Others who have given us their ideas say that it is best to work rapidly. Give your first reaction. If you read and re-read the statements it tends to be confusing and it will take up too much of your time.

"Child" in this study refers to children between the ages of one and four years unless the statement indicates otherwise.

A = strongly agree
a = mildly agree
un = uncertain
d = mildly disagree
D = strongly disagree

1. When parents stay beyond the scheduled visiting hours, the normal hospital routine is upset. A a un d D

2. The nurse-patient relationship is frequently enhanced by parental involvement. A a un d D

3. If a given procedure is explained to a parent in a patient and understanding manner, the parent will be better able to give the child the emotional support he needs. A a un d D

4. It is not necessary, under usual circumstances, to inform parents if there is a positive change in the child's condition. A a un d D

5. It is generally good practice to allow a parent to accompany his or her child to X-ray. A a un d D

6. Generally, parents should not be allowed to accompany their children into the X-ray room after having observed the necessary precautions. A a un d D

7. If mothers are involved in the care of their terminally ill children, they will usually have an easier time adjusting to their death. A a un d D

8. The mother who insists on staying with her child is usually a very upset person. A a un d D

9. Parents should be allowed to visit the hospital whenever they wish. A a un d D

10. When death occurs, it is usually better for parents to be absent from the room. A a un d D

11. It is usually better for the nurse to explain a procedure to a child than it is to have the parent do the explaining after having been instructed by the nurse, even if the parent is able to fully understand the procedure. A a un d D

12. The mother who shows visible signs of being upset over her child's condition should not be allowed to visit her child. A a un d D

13. It is not necessary, under usual circumstances to inform parents if there is a negative change in the child's condition. A a un d D

14. The presence of a child's parents is usually very comforting to him. A a un d D

15. Explaining a medically difficult procedure to a parent, such as a spinal tap, usually fails to make the parent feel more at ease. A a un d D

16. Mothers should be encouraged to stay in the hospital through such means as free meals, bus fare, etc. if the financial situation in the home is marginal. A a un d D

17. Most parents are not aware of when it is good for them to be with their child and when it is not. A a un d D

18. Nurses should always give medications to children even if the medication is one which a mother would normally give in the home. A a un d D

19. If death is expected within a few days and the child is conscious, parents should be encouraged to stay with their child. A a un d D

20. It is better for a mother to feed her own baby than it is for the nurse to do so, provided it is not medically contraindicated. A a un d D

21. Most mothers should be allowed to change simple dressings provided they have been instructed by the nurse and are under nursing supervision. A a un d D

22. When a mother volunteers to feed a child other than her own and permission for such has been granted by the natural mother of the child, she should be allowed to do so provided such action is not medically contraindicated. A a un d D

23. Generally, parents should not be told the diagnosis and the implications of the diagnosis in terminal cases. A a un d D

24. In procedures in which the child needs to be restrained such as in giving injections, a parent can often carry out this function. A a un d D

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Title: YOU AND DEATH

Author: Shneidman, Edwin S.

Variables: The variables under study are (1) childhood experiences of and attitudes toward death, (2) beliefs and wishes about afterlife, (3) thoughts about one's own death, (4) feelings about the disposition of one's own body, (5) past tries and probability of future attempts of suicide, (6) wills, funerals, and other death rituals.

Description:

Nature and Content: This is a self-administered, 75-item instrument. The first 57 items operationalize the variables identified in the preceding section; items 58 through 75 elicit respondent demographic data. Multiple choice responses are provided for each question; the number of response choices varies from 2 to 9. Sample items from the instrument are:

> 4. Which of the following best describes your childhood conceptions of death? (A) Heaven-and-hell concept, (B) After-life, (C) Death as sleep, (D) Cessation of all physical and mental activity, (E) Mysterious and unknowable, (F) Something other than the above, (G) No conception, (H) Can't remember.
>
> 8. To what extent do you believe in a life after death? (A) Strongly believe in it, (B) Tend to believe in it, (C) Uncertain, (D) Tend to doubt it, (E) Convinced it does not exist.
>
> 32. If your physician knew that you had a terminal disease and a limited time to live, would you want him to tell you? (A) Yes, (B) No, (C) It would depend on the circumstances.

Administration and Scoring: No special provisions are necessary for administration; the respondent must be able to read at 10th grade level. Approximately 20 minutes are required to complete the instrument.

In Golub's study (referenced below), no individual scores were computed for any respondent—frequencies were tallied and percentages were computed for each response alternative.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: No information was provided.

Procedure for Development: The questionnaire was designed by Edwin S. Shneidman, Center for Advanced Study in the Behavioral Sciences, in consultation with Edwin Parker and G. Ray Funkhouser of Stanford University. It is a modification of a questionnaire Shneidman developed at Harvard University with the help of four graduate assistants: Chris Dowell, Ross Goldstein, Dan Goleman, and Bruce Smith.

Reliability and Validity: No information was provided.

Use in Research: The questionnaire was published in *Psychology Today*, August 1970, along with instructions for completion and a request for readers to complete the reply form and mail it to the periodical office. More than 30,000 readers returned completed questionnaires. The results of that study are described in the Shneidman reference cited below.

The instrument has also been used in a study by Golub and Reznikoff (1971) comparing the attitudes of nursing students toward death with that of graduate nurses.

Comments: This instrument was developed to obtain information relative to people's perceptions of death and dying. In its present form, it does not purport to do more. It does have potential as a research instrument on a concept of special interest and concern to nurses. The instrument's reliability and validity should be established and any potential user should give it a great deal of psychometric attention, e.g., item analysis, cluster analysis, etc.

References:

Golub, Sharon. *Fear of death among nurses.* Unpublished paper presented at Thanatology Symposium, White Plains, New York, 1974.

Golub, Sharon, and Reznikoff, Marvin. Attitudes toward death. *Nursing Research*, 1971, *20* (6), 503–508.

Shneidman, Edwin S. Death questionnaire. *Psychology Today*, August 1970, *4* (3).

______. You and death. *Psychology Today*, June 1971, *5* (1).

______. *Deaths of man.* New York: The New York Times Book Company, 1973.

Source of Information:

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Instrument Copyright:

Psychology Today
Box 744
Del Mar, Calif. 92014

The instrument is not reproduced in this compilation.

Title: TRUST SCALE FOR NURSES (TS–N)

Authors: Wallston, Kenneth A., Wallston, Barbara S., and Gore, Susan

Variables: The Trust Scale for Nurses (TS–N) measures two variables: nurses' trust of patients (TS–N–P), and nurses' trust of other nurses (TS–N–N). No specific definitions are provided for these variables. However, trust apparently has the same meaning here as that provided by Rotter in the Interpersonal Trust Scale (ITS). Rotter defined interpersonal trust as the belief that "the word, promise, verbal or written statement of another individual or group can be relied upon" (Rotter, 1967).

The variables are operationally defined by asking respondents to indicate the extent to which they agree or disagree with a series of questions dealing with nurse-patient and nurse-nurse relationships.

Description:

Nature and Content: Trust of patients (TS–N–P) is measured by six items, such as "Most patients answer questions about their health habits honestly." Trust of other nurses (TS–N–N) is measured by responses to four items such as: "If a patient were under anesthesia and said something they wouldn't have said otherwise, most nurses wouldn't go around talking about it" (Wallston et al., 1973). Half of the statements used to measure each variable are worded positively; half of the statements are worded negatively. Responses to the 10 questions are indicated on a 7-point rating scale with the two end points defined as strongly agree and strongly disagree.

Administration and Scoring: The Trust Scale was designed to be self-administered, and no special provisions are needed. Directions for completion of the instrument precede the first item.

Responses to all items are scored so that 7 indicates a high degree of trust. Responses to the reverse-worded items are reversed before being added to the responses to the nonreverse-worded items. Scores on the two variables are derived by summing responses to the respective groups of items. If a respondent fails to respond to a given question, that response is estimated by taking the average response to the other items in the particular subscale and rounding it off to the nearest integer. The author states that if more than one response is missing, it is better to invalidate the entire set of responses (Personal communication with author, 1976). Scores on the TS–N–P may range from 6 to 42, those on TS–N–N from 4 to 28, and those on the total scale from 10 to 70.

Development:

Rationale: Trust between nurses and patients is considered fundamental to full attainment of the purpose of nursing. Nurses must be able to trust before they can assist patients to trust. Patients experiencing the openness of trust should be better able to share their true feelings with nurses. Mutual trust would allow for greater accuracy in nursing observations and diagnoses and, therefore, increase the effectiveness of nursing interventions (Wallston et al., 1973).

Source of Items: The authors did not indicate the source of the items used in this instrument, other than to note that they were part of an initial pool of 34 such questions.

Procedure for Development: Ten of the above mentioned 34 items were selected for inclusion in the present scale based on the following criteria: (1) The item had to have a correlation of at least 0.30 with some of the other 33 items, (2) The mean score had to be approximately 4.00, and (3) Responses had to be spread across the 7 response alternatives.

Those items in the original pool that had to do with trust of self and of institutions did not meet these criteria and, therefore, were excluded from the final scale.

The sample used to select the 10 items used in the Trust Scale for Nurses was made up of 45 senior and 19 graduate nursing students. It appears that only the data from the 19 advanced students were used to select the 10 items used in the current form of the test. The sample used to provide the data for test-retest reliability information consisted of 15 registered nurses. The sample of nurses used to provide information about the relationship between the ITS score and the TS–N measures was located at the Nashville Veterans Administration Hospital. Fifty-five (35 percent) of the 157 total sample returned the ITS questionnaire, 92 (50 percent) returned the TS–N questionnaires (Wallston et al., 1973).

Reliability and Validity: Test-retest reliability information is based on the responses of 15 registered nurses who took the same test twice. There was an 8-month interval between the two tests. The test-retest correlations were 0.86 for TS–N, 0.70 for TS–N–P, and 0.68 for TS–N–N (Wallston et al., 1973). No internal consistency-reliability type information was available.

No information was provided regarding the distribution of nurses on these measures. The scores of several subgroups of interest to the authors suggest, however, that the typical respondent tended to agree somewhat more than disagree, for they had mean scores of about 5.0 on the 7-point scale. In addition, the standard deviations for these groups suggest that they were relatively homogeneous, for the observed variance would be only from 5 to about 10 percent of that which is theoretically possible on such scales.

No information was available regarding the relationship between scores on the three measures and various demographic characteristics of the respondents such as sex, age, religion, and educational background. Neither was there any specific information about the relationship between TS-N-N and TS-N-P. However, the fact that TS-N-P correlates somewhat better with the ITS measure than does TS-N-N suggests that these two sets of items are measuring different variables.

The Interpersonal Trust Scale score (Rotter, 1967) was used to provide information regarding the extent to which the Trust Scale for Nurses' measures are similar to another test presumed to measure a similar variable. The highest correlation reported between these two tests was 0.32.

Analyses were run to determine the relationship between the Trust Scale for Nurses' scores and whether or not the respondent was willing to participate in future research. The results indicated that those who were willing to participate in future research had higher scores on TS-N-P ($p < 0.01$) and TS-N ($p < 0.02$).

Use in Research: The TS-N was used in a study of 66 registered nurses at the Murfreesboro, Tennessee, Veterans Administration Hospital (Battle and Wallston, 1973).

Comments: The TS-N appears to be easy to administer. The use of an average scale for missing items is often a good practice, but in this case the two variables are measured by an insufficient number of items to make the procedure defensible. An alternative strategy is to average the items to which the subject has actually responded to arrive at a score for that variable.

The fact that the relationship between the ITS and TS-N scores is minimal suggests that the Trust Scale for Nurses is not measuring the same variable as the ITS. This is also suggested by the fact that the more general trust type items were removed from the final TS-N because they did not relate well to the TS-N in the preliminary item analysis. This is not necessarily a problem. Eight of the 10 TS-N questions appear to have content that suggest trust. Consequently, there is not a priori reason to think that they may not be used to provide such information. However, further information is needed regarding the inter-item relationships of these items before such a decision could be supported.

The fact that half of the nurses at the VA hospital refused to participate in the research raises a question about the variance observed in the initial sample of respondents. As indicated above, the group appears to be fairly homogeneous. If this were true and if those who chose not to respond held considerably different opinions and had responded, then it is possible that different inter-item characteristics would be present. Since the intent of such a test is to provide information about persons other than just those who volunteer to participate in research, additional information is needed to illuminate the differences between such groups and to indicate how these differences may affect the scale characteristics of the TS-N measures.

Moreover, the limited size of the sample used to gather information on reliability and the initial item characteristics are too small to make other than the most limited generalizations. Consequently, before the TS-N is used in other than a very tentative fashion, it should be given to much larger groups of respondents under conditions designed to improve the quality and dependability of such information.

Finally, the basic rationale for the use of the TS-N involves a belief that nurses who have higher trust scores will be more accurate in their nursing observations and diagnoses and, therefore, will be more effective in their nursing interventions. No data are presently available regarding this potential. Such data are critical for making a decision regarding the validity and/or practical utility of the test. Consequently, subsequent use of the TS-N should include attempts to gather data relevant to this issue.

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Wallston, Kenneth A., Wallston, Barbara S., and Gore, Susan

TRUST SCALE FOR NURSES (TS-N)

This is a questionnaire to determine the beliefs of nurses about relationships with patients and other nurses. Please answer the statements by giving as true a picture of your own beliefs as possible. There are no right or wrong answers. Be sure to read each item carefully, and respond to it on the grid below.

1. Most patients answer questions about their health habits honestly. (TS-N-P)

2. If a patient were under anesthesia and said something they wouldn't have said otherwise, most nurses wouldn't go around talking about it. (TS-N-N)

*3. A nurse is better off being cautious in dealing with patients until they have provided evidence that they are trustworthy. (TS-N-P)

4. A patient will not ring for a nurse unless he has a real need for her. (TS-N-P)

*5. Patients often complain to their families, doctors, and other patients about the way nurses treat them. (TS-N-P)

6. Patients will often go out of their way to be helpful to other patients. (TS-N-P)

7. Most nurses live up to their responsibilities. (TS-N-N)

*8. Few nurses are really concerned about their patients' welfare. (TS-N-N)

*9. Given the opportunity, almost any patient on a strict hospital diet will try to sneak in some forbidden food. (TS-N-P)

*10. Most nurses like to gossip with each other about their patients. (TS-N-N)

* Indicates reversed scoring (i.e., high agreement means low trust).

Response Scale:

strongly agree						strongly disagree

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Title: QUESTIONNAIRE FOR UNDERSTANDING THE DYING PERSON AND HIS FAMILY

Author: Winget, Carolyn, Yeaworth, Rosalie C., and Kapp, Fredric T.

Variables: The questionnaire was designed to obtain attitudinal and experiential data on death and dying from health care professionals. *Attitude* is defined as "a complex, structured psychological tendency to respond in a consistent way to social objects or situations." Attitudes toward death and dying are assessed in terms of flexibility in interpersonal relations, desire for open communication about critical issues, and "psychological-mindedness" in relation to patients and families of dying patients. Experiences with death and dying include events in one's personal life and professional training.

Description:

Nature and Content: The 6-page questionnaire has three sections. Part I consists of 50 Likert-type items to be answered using a 5-point scale: SA = strongly agree, A = agree, U = uncertain, D = disagree, SD = strongly disagree. Thirty-three of the items contribute to a total score, while the remaining 17 items are apparently fillers. Typical items are: "Regardless of his age, disabilities, and personal preference, a person should be kept alive as long as possible," and "Dying patients should be told they are dying."

Part II consists of 13 items with varying response alternatives. These deal with the respondent's experiences with death and dying and his attitudes toward funerals, autopsies, and educational experiences about death. For example, "Have you ever been asked to talk with a person who is dying?" (The respondent checks "yes" or "no.") "Has anyone in your immediate family died?" (The respondent checks the appropriate relationship, "father," "mother," "sister," etc. and then records the respondent's age at the time the death occurred.)

Part III consists of five items of demographic information about the respondent (sex, religion, age, intensity of religious belief, and professional status).

Administration and Scoring: The questionnaire is self-administered and requires approximately 25 to 40 minutes to complete.

A scoring key has been developed for Part I of the questionnaire. Positive items (reflecting openness-flexibility) are scored from 1 (strongly agree) to 5 (strongly disagree). For negative items (reflecting rigidity and lack of insight), the scores are reversed. The resulting ratings for the 33 items are summed to yield a total score. Scores on Part I may range from a minimum of 33 to a maximum of 165 for the 33 scored items. Low scores indicate flexibility in interpersonal relations, a desire for open communication around critical issues, and "psychological-mindedness" in relation to dying patients and their families. High scores indicate a rigidity of attitudes, a focus on physical needs during terminal illness, and a lack of insight into psychological factors influencing the self and others.

Most of the items in Parts II and III seek factual information about the respondent, and scoring will depend upon the needs and purposes of the individual investigator. The authors suggest categorizing responses to the second sentence completion task ("If I learned today that I had a fatal illness, I would probably . . .") into those that emphasize emotional responses, those that emphasize "doing," and those that include elements of both.

Development:

Rationale: Kübler-Ross has emphasized that individuals must evaluate their own attitudes toward death and dying before they can be helpful to terminally ill patients without feeling anxiety or other discomfort. Although nurses play a pivotal role in facilities for geriatric and terminally ill patients, little research has been devoted to the attitudes of health care personnel and how they may affect or modify the management and treatment of these patients. Presumably, greater acceptance of feelings about death, more open communication, and broader flexibility in relating to dying patients and their families facilitates better patient care.

Source of Items: The contents of the questionnaire were based upon the professional experience of an interdisciplinary team of the University of Cincinnati—a social worker and some members of the faculty of the College of Nursing and Health and the College of Medicine. Members of the team had had various amounts of experience with dying patients and in conducting teaching sessions for nursing students and medical students for the students' work with dying patients.

Procedure for Development: In Part I, item construction was designed to minimize the effects of response set by using both positively and negatively worded items on similar content issues.

Reliability and Validity: A student research study conducted in 1976 with 46 senior and 88 sophomore nursing students investigated coefficient alpha as a measure of internal consistency. The coefficient alpha for this instrument was found to be 0.72 (Winget, 1976).

Discriminant validity of Part I was demonstrated in a study of attitudes of nursing students toward the dying patient that involved the entire freshmen and senior classes (n = 108 and n = 69, respectively) in the College of Nursing and Health of the University of Cincinnati (Yeaworth et al., 1974). Scores on the attitudinal portion of the measure discriminated between senior nursing students who had taken formal classes on loss and grief and on death and dying, in addition to having had clinical conferences on these topics, and freshman nursing students who had not had this educational experience ($t = 8.69$ for mean scores, $p < 0.001$).

Construct validity was assessed by administering the questionnaire, the Rotter I–E Scale, and the Defense Mechanisms Inventory (DMI) to men and women enrolled in an evening course on death and dying. Those expressing greater affect on the DMI and those who had scores toward the internal control pole on the I–E Scale also had low scores on the death and dying questionnaire. Norms are available for freshmen and senior nursing students and medical students, practicing physicians and registered nurses, and college students (Winget, 1976).

Use in Research: The instrument was originally used in a study by Yeaworth, Kapp, and Winget (1974) to measure attitudes of 108 freshmen and 69 seniors in a baccalaureate nursing program toward death and dying persons. The authors reported, "Since then it has been widely used in both undergraduate and graduate nursing student projects."

Comments: Part I of the questionnaire has considerable value as a measure of health professionals' openness and flexibility in dealing with dying patients. Since it was developed for college and professional students, the language in some of the items might present difficulties for less well-educated respondents (e.g., Part I, Item 16: "Individual freedom of choice ultimately should mean freedom of choice to live or die within a context of responsibility for self and others.") An item analysis is strongly recommended to determine, for example, whether focusing on the physical needs of the patient precludes an emotional response to his situation.

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Winget, Carolyn. (Personal communication) 1976.

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Winget, Carolyn, Yeaworth, Rosalie C., and Kapp, Fredric T.

QUESTIONNAIRE FOR UNDERSTANDING THE DYING PERSON AND HIS FAMILY

Subject # ______________________________

Part I: Using the following code, please circle the response that best matches your actual current attitude for each of the following statements.

CODE: SA = Strongly agree
A = Agree
U = Uncertain
D = Disagree
SD = Strongly disagree

SA A U D SD 1. Regardless of his age, disabilities, and personal preference, a person should be kept alive as long as possible.

SA A U D SD 2. Dying patients should be told they are dying.

SA A U D SD 3. Medical personnel find it more satisfying to work with patients who are expected to improve rather than with patients who are likely to die.

SA A U D SD 4. The dying patient is best served by a matter-of-fact focus on medical issues.

SA A U D SD 5. Discussion among doctors, nurses, and other health workers about the care of the dying may reveal differences in attitudes toward death and dying.

SA A U D SD 6. It is important in the treatment of the dying patient to discuss his feelings with him.

SA A U D SD 7. Doctors, nurses, family and friends, if they prefer, can keep knowledge about his status from the dying patient.

SA A U D SD 8. Fear of death is natural in all of us.

SA A U D SD 9. Feelings of depression in the dying patient are unusual.

SA A U D SD 10. The patient is better off not knowing his diagnosis e[illegible] when it carries an implication of imminent death.

SA A U D SD 11. If a patient talks about his fear of death, his doctors and nurses should reassure him that he has little to worry about.

SA A U D SD 12. Nurses and doctors usually communicate easily with each other on issues relating to the needs of the dying patient.

SA A U D SD 13. Those who support the principle of "death with dignity" endorse active as well as passive euthanasia.

SA A U D SD 14. No matter what my personal beliefs, in my role as a medical professional I would fight to keep the patient alive.

SA A U D SD 15. The dying patient who talks about his future plans for work, family, trips, etc., does not realize the seriousness of his condition.

SA A U D SD 16. Individual freedom of choice ultimately should mean freedom of choice to live or die within a context of responsibility for self and others.

SA A U D SD 17. Even if they don't ask, relatives should be told when death is imminent in the ill patient.

SA A U D SD 18. Dealing with a dying patient makes one aware of his own feelings regarding death.

SA A U D SD 19. Family members who stay close to a dying patient often interfere with the professional's job with the patient.

SA A U D SD 20. Death means annihilation of the physical, social, and psychological self.

SA A U D SD 21. Dying in the United States is handled more humanely than it is in most other parts of the world.

SA A U D SD 22. If given a choice, I prefer to avoid contact with dying people.

SA A U D SD 23. It is natural for medical personnel to grieve for their patients who die.

SA A U D SD 24. I rarely think of dying.

SA A U D SD 25. The dying patient is physically ugly.

SA A U D SD 26. It is possible for medical personnel to help patients prepare for death.

SA A U D SD 27. Medical personnel tend to cut down on their visits to the dying patient if there is little that can be done for him medically.

SA A U D SD 28. Patients are better off dying in a hospital than at home.

SA A U D SD 29. Suicide is wrong.

SA A U D SD 30. When thinking of dying, I fear the idea of disability and pain more than death itself.

SA A U D SD 31. Dying patients feel less comfortable if they have frequent visitors during their final days.

SA A U D SD 32. Nurses should be the primary professionals equipped to deal with the reaction of a dying patient.

SA A U D SD 33. Some patients should be allowed to die without making heroic efforts to prolong their lives.

SA A U D SD 34. Relatives who know the prognosis of the terminally ill patient make patient management more difficult.

SA A U D SD 35. The terminally ill patient frequently turns to his doctor and nurse to discuss his feelings about dying.

SA A U D SD 36. Our imagination about dying is harder to handle than the reality.

SA A U D SD 37. The more intelligent a person is, the less he fears death.

SA A U D SD 38. The dying patient mourns his own coming death.

SA A U D SD 39. Dying is a painful process.

SA A U D SD 40. Training medical personnel on attitudes toward dying is inappropriate because helping people to live is their goal.

SA A U D SD 41. The dying patient should be separated from other patients during the final period.

SA A U D SD 42. Many patients prefer to be told when their death is near.

SA A U D SD 43. The term "pass away" is preferable to the term "die."

SA A U D SD 44. It is all right for people to whisper to one another in the presence of a dying person.

SA A U D SD 45. Doctors and nurses should be detached emotionally if they are to work in the best interests of the dying patient.

SA A U D SD 46. Sometimes patients give up on themselves because the medical personnel have given up on them.

SA A U D SD 47. It is a common tendency to "skip over" dying persons on teaching rounds.

SA A U D SD 48. I usually feel at ease talking with physicians about dying patients for whom they are responsible.

SA A U D SD 49. The physician ordinarily discusses frankly with the family the implications of a diagnosis of a usually fatal disease.

SA A U D SD 50. Suicide may be justified in the terminally ill.

- -

Part II:

1. Have you ever discussed attitudes toward death and dying with your friends, classmates, or colleagues? Yes_____ No_____

2. Have you ever been asked to talk with a person who is dying? Yes_____ No_____

3. Do you usually go to the funerals of relatives, friends, and close colleagues? Yes_____ No_____

4. Do you usually pay condolence calls on the families of deceased relatives, friends, and close colleagues? Yes_____ No_____

5. Has anyone in your immediate family died? Yes_____ No_____

Relationship:		Your age then:
Father	_____	_____
Mother	_____	_____
Sister	_____	_____
Brother	_____	_____
Grandparent	_____	_____
Other close relative	_____	_____

6. Have any of your close friends died as a result of:

	Yes	No
Suicide?	_____	_____
Accident?	_____	_____
Acute illness?	_____	_____
Chronic illness?	_____	_____
Old age?	_____	_____

7. Have you made a Will? Yes_____ No_____

8. Do you think funeral services are of value to the survivors? Yes_____ No_____

9. Do you prefer:

_____ Traditional burial with open casket?
_____ Traditional burial with closed casket?
_____ Cremation
_____ Placement in a mausoleum
_____ Donate body to medical science
_____ Doesn't matter

10. Necropsy (autopsy):
I (do/do not) prefer necropsy for myself.

I (do/do not) prefer necropsy for members of my family.

I (do/do not) prefer necropsy for my patients.

_____ I have no personal opinion on this subject.

11. I (would/would not) want my family to know I have a fatal illness

because ____

____

____

____

12. If I learned today that I had a fatal illness, I would probably

____

____

____

13. Would it be helpful if your training as a health professional included material on how to deal with the dying patient and his family?

	Yes	No
Lectures or seminars	_____	_____
Panels	_____	_____
Group discussions	_____	_____
Reading lists	_____	_____
Clinical conferences	_____	_____

Scoring Key

Questionnaire for Understanding the Dying Person and His Family

KEY

1. -
2. +
$\boxed{3}$.
4. -
$\boxed{5}$.
6. +
7. -
8. +
9. -
10. -
11. -
$\boxed{12}$.
13. -

14. -
15. -
16. +
17. +
18. +
19. -
$\boxed{20}$.
21. -
$\boxed{22}$.
23. +
$\boxed{24}$.
$\boxed{25}$.
26. +
$\boxed{27}$.
$\boxed{28}$.
29. -
$\boxed{30}$.

31. -
$\boxed{32}$.
33. +
34. -
$\boxed{35}$.
36. +
37. -
38. +
$\boxed{39}$.
40. -
41. -
42. +
43. -
44. -
$\boxed{45}$.
46. +
$\boxed{47}$.

$\boxed{48}$.
$\boxed{49}$.
50. +

- = SA = 5
+ = SA = 1
☐ = No score

Minimum - 33
Maximum - 165

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Client Cognitive Variables

Title: SEX KNOWLEDGE TEST

Author: Bloch, Doris

Variable: This instrument elicits information on sex knowledge. The variable is operationalized by responses to questions such as "How long does the baby develop in the mother before it is born?"

Description:

Nature and Content: There are two forms of this multiple-choice test. Form A consists of 25 items and was designed to be used with mothers. Form B consists of the same 25 items plus 2 "test-taking ability" items and was designed to be used with 12-year-old girls. The subject matter areas covered by both instruments are: male anatomy and physiology; female anatomy, physiology, and menstruation; pregnancy and birth; father's role in reproduction and fertilization; and venereal disease.

Form A elicits information only on respondent's sex knowledge. Form B elicits this information, as well as data on the source of the respondent's sex knowledge. Instructions for the respondent are provided as part of the instrument.

Administration and Scoring: This instrument was designed to be self-administered, but it can be administered by interview. On Form A and the corresponding part of Form B, three response alternatives, one of which represents a true or correct response, are provided for each question. The score is derived by dividing the number of correct responses by 25 (the total number of questions) and multiplying the result by 100. This score is a percent and can range from 0 to 100. (The two "test-taking ability" questions on Form B are not used to arrive at a score.)

For that portion of Form B which identifies sources of sex information, respondents are allowed to name one or more sources for a single question. From this, the number of times a source is mentioned is calculated. Sources are categorized (parents, school, printed material, peers, siblings, church, television, doctor, nurse, youth groups, and other) and ranked according to frequency of identification by respondents.

Development:

Rationale: This instrument was developed to obtain a measure of the accuracy of a mother's estimate of her daughter's sex knowledge and sources of sex information. The author indicated that alternative tests in this area were not appropriate for the purposes of her study, that is to say, (1) usable with 12-year-old girls and their mothers, (2) usable with mothers of a wide range of educational levels, (3) based on concepts rather than terminology, and (4) not so difficult that it would frustrate the respondents unduly. This instrument was developed to overcome such problems.

Source of Items: The items were based on tests such as those developed by Dobrow and Exelby (1968a,b) and Robinson (1949), and the author's professional experience.

Procedure for Development: The questions contained in this instrument were selected after having been pretested with 17 mothers. They were then administered to 124 mothers and their 12-year-old daughters along with several other tests that provided information on mothers' attitudes toward sex education and their sex education practices with respect to their daughters. The mothers lived in two small towns in California. The respondents in one town had lower incomes and less education than did those from the other; but together the sample spanned the socioeconomic spectrum.

Reliability and Validity: No information on reliability was provided.

Parents who preferred to be the source of their children's sex information had significantly higher sex knowledge scores ($p < 0.001$) than did those who preferred to have other persons assume this responsibility. There also was a significant positive relationship ($p < 0.001$) between sex knowledge and parents' attitudes toward the content and timing of sex education. Parent sex knowledge and daughter sex knowledge were similarly related. Parents who had higher family incomes and/or more education also had higher scores on sex knowledge ($p < 0.001$).

Use in Research: The development and use of this instrument, along with four other instruments described elsewhere in this compilation

(Attitudes Toward Content and Timing of Sex Education, Attitudes Toward Sex Education in Schools, Parental Sex Education Practices Interview, and Parental Sex Education Practices Checklist) are described in Bloch's doctoral dissertation referenced below.

Comments: The instrument appears to have potential for measuring the variable it was designed to measure. However, the scores of the mothers, as well as of the 12-year-old girls, were skewed very high—especially those of the mothers. If the test were to be used as a measure of sex knowledge (which was not the basic purpose in the study for which it was developed), it may be more appropriate for use with slightly younger children. Norms for different age groups should be developed. It would be helpful to have information on the test-retest and/or split-half reliability characteristics of the instrument. It would also be helpful to have information on the instrument's inter-item characteristics. The tool was designed to elicit information on several content areas. Therefore, it would be useful to have information on the item relationships within and between these areas. It would also be helpful to have information on the relationship between sex knowledge and variables such as subsequent events that happen to the daughters, specific attempts to increase sex knowledge, and fathers' and sons' scores on this instrument. Finally, it would be useful to have information on the characteristics of the instrument derived from a much larger sample of mothers and daughters in a variety of locations.

Any potential user should examine the instrument to be certain the terminology used is appropriate for his(her) study population.

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Bloch, Doris

SEX KNOWLEDGE TEST (FORM A)

1. Where do babies come from?

   a. from the hospital
   b. out of the mother
   c. from some place else

2. How often do most women menstruate?

   a. once a week
   b. once a month
   c. once a year

3. When does a new baby begin to grow?

   a. when the mother releases an egg
   b. when the father releases a sperm
   c. when the sperm meets the egg

4. Why do some people use birth control?

   a. because they want to have a baby
   b. because they don't want to have a baby right then
   c. because they want twins

5. A woman can become pregnant only:

   a. if she is married
   b. if she is in love
   c. if she has intercourse

6. How many sperms are needed to fertilize one egg?

   a. only one
   b. a few
   c. many

7. When is a boy first able to become a father?

   a. when he is 18 years old
   b. when he gets married
   c. when his sex glands mature

8. What fluid can leave a man's body when the penis is soft and limp?

   a. sperms
   b. urine
   c. blood

9. How often does an egg mature in a woman's body?
    a. once a week
    b. once a month
    c. once a year

10. How does a baby get its food before it is born?
    a. through the placenta and the cord
    b. through the mouth and throat
    c. through the nose and lungs

11. At what time of the month is a woman most likely to get pregnant?
    a. halfway between two menstrual periods
    b. just before her menstrual period
    c. just after her menstrual period

12. Where do sperms develop?
    a. in the penis
    b. in the testicles
    c. in the blood

13. What happens when a baby is ready to be born?
    a. the baby starts kicking
    b. the mother's tubes start to open
    c. the mother's uterus starts contracting

14. How does the father's sperm reach the mother's egg?
    a. through kissing
    b. through intercourse
    c. through hugging

15. Why do women menstruate?
    a. to clear the body of bad blood
    b. to get rid of the unfertilized egg
    c. to shed the lining of the uterus

16. When is a girl first able to become a mother?
    a. when she begins to menstruate
    b. when she is 18 years old
    c. when she gets married

17. Where are human eggs produced?
    a. in the uterus
    b. in the vagina
    c. in the ovary

18. What is a wet dream?

    a. release of sperms during sleep
    b. the same as bedwetting
    c. a nightmare

19. How long does a menstrual period usually last?

    a. a few minutes
    b. about one day
    c. 3-6 days

20. How long does the baby develop in the mother before it is born?

    a. about 3 months
    b. about 6 months
    c. about 9 months

21. What happens to the cord after the baby is born?

    a. it is tied and cut
    b. it stays attached to the baby
    c. it stays attached to the mother

22. How is a baby usually born?

    a. through the mother's bellybutton
    b. through the mother's vagina
    c. through an operation

23. How do people catch a venereal disease?

    a. from spoiled food
    b. from toilet seats
    c. from intercourse with someone who has it

24. What happens to an egg if it does not meet a sperm?

    a. it does not grow
    b. it starts to grow
    c. it remains in the uterus

25. Where are the sperms placed during intercourse?

    a. in the woman's vagina
    b. in the woman's tubes
    c. in the woman's ovaries

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Bloch, Doris

SEX KNOWLEDGE TEST (FORM B)

	I think it's	I am just guessing	I learned it from
1. Where do babies come from? a. from the hospital b. out of the mother c. from some place else			
2. How often do most women menstruate? a. once a week b. once a month c. once a year			
3. When does a new baby begin to grow? a. when the mother releases an egg b. when the father releases a sperm c. when the sperm meets the egg			
4. Why do some people use birth control? a. because they want to have a baby b. because they don't want to have a baby right then c. because they want twins			
5. A woman can become pregnant only: a. if she is married b. if she is in love c. if she has intercourse			
6. How many sperms are needed to fertilize one egg? a. only one b. a few c. many			

	I think it's	I am just guessing	I learned it from
7. When is a boy first able to become a father? a. when he is 18 years old b. when he gets married c. when his sex glans mature			
8. What fluid can leave a man's body when the penis is soft and limp? a. sperms b. urine c. blood			
9. How often does an egg mature in a woman's body? a. once a week b. once a month c. once a year			
10. How does a baby get its food before it is born? a. through the placenta and the cord b. through the mouth and throat c. through the nose and lungs			
11. At what time of the month is a woman most likely to get pregnant? a. halfway between two menstrual periods b. just before her menstrual period c. just after her menstrual period			
12. Where do sperms develop? a. in the penis b. in the testicles c. in the blood			

	I think it's	I am just guessing	I learned it from
13. What happens when a baby is ready to be born? a. the baby starts kicking b. the mother's tubes start to open c. the mother's uterus starts contracting			
14. How does the father's sperm reach the mother's egg? a. through kissing b. through intercourse c. through hugging			
15. Why do women menstruate? a. to clear the body of bad blood b. to get rid of the unfertilized egg c. to shed the lining of the uterus			
16. When is a girl first able to become a mother? a. when she begins to menstruate b. when she is 18 years old c. when she gets married			
17. Where are human eggs produced? a. in the uterus b. in the vagina c. in the ovary			
18. What is a wet dream? a. release of sperms during sleep b. the same as bedwetting c. a nightmare			

	I think it's	I am just guessing	I learned it from
19. How long does a menstrual period usually last? a. a few minutes b. about one day c. 3-6 days			
20. How long does the baby develop in the mother before it is born? a. about 3 months b. about 6 months c. about 9 months			
21. What happens to the cord after the baby is born? a. it is tied and cut b. it stays attached to the baby c. it stays attached to the mother			
22. How is a baby usually born? a. through the mother's bellybutton b. through the mother's vagina c. through an operation			
23. How do people catch a venereal disease? a. from spoiled food b. from toilet seats c. from intercourse with someone who has it			
24. What happens to an egg if it does not meet a sperm? a. it does not grow b. it starts to grow c. it remains in the uterus			

	I think it's	I am just guessing	I learned it from
25. Where are the sperms placed during intercourse? a. in the woman's vagina b. in the woman's tubes c. in the woman's ovaries			
26. Newborn babies can: a. talk b. suck c. walk			
27. Newborn babies usually drink: a. coffee b. tea c. milk			

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Title: DIABETES MELLITUS PATIENT INTERVIEW

Author: Bowen, Rhoda G., Rich, Rosemary, and Schlotfeldt, Rozella M.

Variables: This instrument measures a diabetes mellitus patient's (1) knowledge of the disease, (2) knowledge of insulin, (3) performance in self-administration of insulin, (4) performance in testing urine for the presence of glucose, (5) knowledge of diet and food exchange, (6) attitudes and knowledge of personal hygiene, and (7) attitudes toward the disease.

Description:

Nature and Content: This is a structured interview guide of 100 items which elicits information on the variables identified above. The items are divided as follows:

	Items
1. Knowledge of the disease	1–9
2. Knowledge of insulin	10–30
3. Performance in self-administration of insulin	31–49
4. Performance in urine testing (Clinitest)	50–56
5. Knowledge of diet and food exchange	57–76
6. Attitudes and knowledge of personal hygiene	77–86
7. Attitudes toward the disease	87–100

Beside each question, preferred or acceptable answers are stated, and a space is provided for checking the respondent's answer as correct or incorrect.

Administration and Scoring: The interviewer should make an appointment with the respondent for conducting the interview and arrange for the interview to be conducted in a room which permits privacy and has the equipment and the space needed for the two performance components. In the authors' study, a prepared mixture which indicated a 2+ reaction for sugar was substituted for urine in the Clinitest.

Each respondent answer is checked as being correct if it corresponds in essence to that recorded on the interview schedule.

The authors stated that the total possible score is 185 points distributed as follows: (1) knowledge of disease—10 points, (2) knowledge of insulin—46 points, (3) knowledge of diet and food exchange—59 points, (4) knowledge of personal hygiene—25 points, (5) attitudes toward the disease—10 points, (6) self-administration of insulin—28 points, (7) use of the Clinitest—7 points. Total scores and subscores are computed for each patient. Detailed information as to how these point scores were derived was not provided.

Development:

Rationale: The instrument was not based on any specific underlying theory.

Source of Items: The items were based on a review of the literature and the authors' professional experience.

Procedure for Development: An early draft of the interview schedule was tested with seven patients who met the criteria for patients eligible for the authors' study. Following the pretest, modifications in the interview schedule were made. Following that revision, three nurse jurors independently judged the instrument to be appropriate for the authors' study.

Reliability and Validity: No information regarding reliability was provided. Content validity was established by the sources from which the items were derived and the steps followed for development of the instrument.

Use in Research: The instrument was developed and used in a study to evaluate the effects of an organized instructional program for diabetes mellitus patients (Bowen et al., 1961). The study included 51 adult patients, 28 who served as a control group, and 23 who served as an experimental group.

Comments: The instrument is still in the early stages of psychometric development. Reliability and additional validity data are needed. The instrument is detailed and comprehensive and an item analysis might show that it could be shortened without altering its usefulness. For a researcher interested in the variables addressed by this instrument, it could provide a useful starting point for the development of a new tool.

References:

Bowen, Rhoda G., Rich, Rosemary, and Schlotfeldt, Rozella, M. Effects of organized instruction for patients with the diagnosis of diabetes mellitus. *Nursing Research*, 1961, *10* (3), 151–159.

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Author Rhoda G. Bowen requests that she be notified when this instrument is used in any manner.

Bowen, Rhoda G., Rich, Rosemary, and Schlotfeldt, Rozella M.

DIABETES MELLITUS PATIENT INTERVIEW

DIRECTIONS TO INTERVIEWER

1. A brief sample as to a suggested method of approach to the patient has been given below. You will also note suggested conversation for the transition from one area of inquiry to the next.

   One of the objectives of the interview is to gain rapport with the patient through the warm, friendly manner of the interviewer.

RECORDING OF PATIENT RESPONSE

2. Place a check mark in either the correct or incorrect column under the heading "Patient's Response." The correct answers have been written in. They are in the language in which the patient may respond. Answers need not be verbatum but should contain in essence the correct answer. Check marks should be circled " ," and notations made regarding variations in answers from totally correct to totally incorrect.

INTRODUCTION

3. Good Morning, (Patient's Name).

   I am (Interviewer's Name).

   I would like to talk with you a little about your condition. We are attempting to learn what the patients themselves know about their condition, their diet, and the manner in which they give themselves insulin, along with some general information. The reason for our doing this is that we would then know what kind of information and instruction the patients need in order to better understand the reasons for the doctor's orders, so they may be helped in living with their condition.

   I have a number of questions I would like to ask you. I would like you to give me your answer, the way you feel and what you know about this condition.

   Now begin with the questions in Category I.

Patient's Name:
Code No.:
Date of Diagnoses:
Kind of Insulin Prescribed:
Dosage:
Diet Prescribed:

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
Category Knowledge of the Disease		Correct	Incorrect
1. Doctors use the term "sugar in the blood" when they talk to you about your problem. Can you tell me the name of the condition you have ?	1. Diabetes or diabetes mellitus.		
2. Do you know what goes wrong in the body to cause this condition?	2. The body does not have enough insulin, and/or there is interference with the action of insulin in the body.		
3. What happens then to cause your present condition?	3. Your body does not use sugar and starch foods properly.		
4. What tests does the doctor do to find out if your body is using the sugar and starch foods properly?	4. Blood sugar test Tests urine for sugar		
5. Can you tell me what is considered to be the normal amount of sugar in the blood?	5. 80 - 120 mg. per 100 cc. of blood.		
6. Is this condition, "diabetes," catching?	6. No		
7. Do you know if it "runs in families?"	7. Yes		
8. How about recovery; Do people having diabetes "get over" having it?	8. No		
9. For some conditions, rest is ordered, others operations, and still others medicine. What are the specific treatments for diabetes?	9. Diet or food regulation and insulin.		

Transition to Category II Knowledge of Insulin

You answered that insulin was one of the specific treatments for diabetes. Now let's talk about insulin and how you use it.

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
Category Knowledge of Insulin		Correct	Incorrect
10. Tell me, aspirin is always aspirin,is insulin that you can get all the same or are there different kinds?	10. There are different kinds.		
11. What is the main difference in these kinds of insulin?	11. The period of greatest reaction and the length of action.		
12. Do you think it is necessary to know the kind of insulin you are taking?	12. Yes		
13. Why?	13. So you know how to regulate your diet and when you might be in difficulty from the insulin which you took.		
14. Can you tell me the kind of insulin you are taking?	14. Check with information on page 1 of interview schedule.		
15. How many units do you take and how often do you take insulin?	15. Same as above		
16. When is the period of greatest reaction for the kind of insulin you are taking?	16. Dependent on above answer. Possible-- Regular 2-3 hours NPH 8-12 hours PZI 12-16 hours Lente 8 hours		
17. Have you heard or read of any other way of taking insulin than by injection?	17. Yes		
18. What is that way?	18. By tablets taken by mouth.		
19. Would it be all right for you to get any kind of insulin without telling your doctor? If so--why? If not--why not?	19. No--each patient must be regulated and the kind of insulin that best controls the condition is prescribed by the doctor		

QUESTIONS	ANSWERS	PATIENT'S RESPONSE
	dependent on the patient's clinical response (laboratory test) to the particular prescription.	
20. Is it possible to have too much insulin in your body?	20. Yes	
21. Can you tell me three times when this may happen, i.e., having too much insulin in your body?	21. 1. When you make a mistake in your dosage. 2. When you do not eat your meals--or you are vomiting and/or have diarrhea. 3. When you do too much strenuous exercise.	
22. Can you tell me some of the ways you feel or act when you have too much insulin in your body? (Signs and Symptoms)	22. 1. Inward nervousness. 2. Weakness 3. Sweating 4. Hungry 5. Blurred vision 6. Act intoxicated 7. Breathe fast and shallow 8. May have convulsions. 9. May become stuporous	
23. What can you do to help yourself if you begin to feel this way?	23. 1. Drink sugar water 2. Drink orange juice 3. Drink pop 4. Eat sugar 5. Eat candy	
24. Do you know what the doctors call this condition when you have too much insulin in your body?	24. Insulin shock or insulin reaction	
25. Do you know what happens if you do not take your insulin?	25. You fall out or go into coma.	
26. Can you tell me what the doctors call this condition?	26. Diabetic Coma--Acidosis is the forerunner of a coma.	

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
27. What other things may cause this condition besides you not taking your insulin?	27. 1. Not following your diet. 2. Having an infection in your body such as a cold, pneumonia, a carbuncle, an ulcer on your leg.		
28. Can you tell me the way you may feel or act when you do not have enough insulin in your body?	28. 1. Thirsty but no appetite. 2. Nausea, vomiting. 3. Cramps or pains in arms, legs or abdomen 4. May feel drowsy 5. Skin cold and dry to touch 6. Face flushed 7. Dim vision 8. Sweet smell or fruity odor to breath		
What should you do if any of these signs or symptoms should begin to show up in you?	Call your doctor right away. If you are a clinic patient, come to the emergency room and tell them you are a diabetic. If in a strange city go to the emergency room in any hospital.		
29. Do you know what you can do until the doctor arrives or until you get to the hospital?	29. Drink clear tea or coffee. Keep warm. Save your urine so it can be tested.		
30. One more question about insulin. Where is the proper place to store insulin when you are not using it?	30. Where it is cool. The ice box, if possible.		

Transition to Category III Self Administration of Insulin (Test of Performance)

Have all the equipment necessary for giving insulin ready; syringe and needle not assembled, sieve in saucepan, cotton, alcohol, and insulin. You are taking insulin. Is that right? Do you give it to yourself? Now I want you to show me just how you go about getting your injection ready. Do everything but inject the insulin into yourself.

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
31. First of all, is there anything special you do to your hands before taking an injection?	31. Yes--wash them well with soap and water.		
32. Handling parts of syringe and needle appropriately. a. barrel of syringe b. plunger c. needle	32. a. outside b. knob c. hub		
33. Is shaft of needle contaminated when syringe placed down in tray?	33. Needle should touch nothing. Syringe can be laid so that hub rests on lid of insulin box.		
34. Rotation of bottle of insulin.	34. Done gently between palms of hands. Does not shake bottle violently.		
35. Cleansing stopper of bottle	35. Uses clean side of alcohol sponge.		
36. Dosage	36. Draws plunger back to the proper number of units		
37. Injects air into bottle, or does not.	37. Patient should inject air into bottle.		
38. If he does so, ask: Can you tell me why you do this, inject air into bottle?	38. To maintain pressure inside of bottle.		
39. Can you explain what will happen if you do not inject air into the bottle before you withdraw the insulin?	39. Negative pressure is caused and it is difficult to withdraw the insulin.		
40. Preparation of skin at site of injection.	40. Uses clean side of alcohol sponge. Cleanses skin area using circular motion from center to periphery.		
41. Tautness of skin.	41. Either spreads skin or pinches muscle between fingers.		

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
42. Ask--If you were actually giving yourself the insulin, what would you do before injecting the medicine to the muscle?	42. Pull back on the plunger after the needle is in the tissues.		
43. Carry on, tell me why you do this.	43. To check that the needle is not in a blood vessel.		
44. Suppose when you pulled the plunger back some blood came into the syringe. What should you do?	44. Pull out needle and begin from the beginning using a fresh needle, syringe and medicine.		
45. Is there anything special to do to the place of injection after you have given yourself the insulin and pulled the needle out of the skin?	45. Massage area gently with clean side of sponge.		
46. Can you tell me why you do this?	46. Stimulates circulation and thus aids in the absorption of the insulin.		
47. Is it all right to use the same spot on your body every day in which you inject the insulin?	47. No		
48. Can you give me a reason for your answer?	48. You develop a reaction in the tissues, either tumefaction--a hardness in tissues resulting in delayed absorption of insulin or lipodystrophy--a sunken hollow area. No pain just disfiguring.		
49. How should you care for the syringe and needle after each injection?	49. Rinse in cold water, push water through needle. Store in a safe place.		

Transition to Category IV Test Performance Procedure to be Followed for Doing Clinitest. A test for the presence of sugar in the urine.

The equipment needed to do a clinitest should be prepared on a tray. Included is a dextrose solution to be used as urine. This is to give a ++ reaction. Be certain to have the chart for interpretation of test.

I was wondering . . . Does the doctor have you check your urine for sugar? Do you do this every day? I would like to see you do the test on this sample of urine for me. Here is the urine sample. Now you go ahead and do just as you would do the test at home.

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
50. Number of drops of water used.	50. 10 drops		
51. Number of drops of urine used.	51. 1.5 drops		
52. Care of medicine dropper after urine has been dropped into test tube. Place dropper in proper container.	52. Should rinse medicine dropper in clean water and place in small jar labeled droppers.		
53. Handling of clinitest tablet.	53. Not touched with fingers--drop into cap of bottle then into test tube.		
54. Handling of tube.	54. Hold tube still by top of tube for one minute. As bubbling stops, shake gently four or five times.		
55. Interpretation of reaction.	55. 2 ++ for sugar.		
56. Ask: If you just do the test once a day, when is the best time to collect the specimen of urine and do the test?	56. Collect the specimen before you eat breakfast and do the test right away.		

Transition to Category V Diet and Food Exchange

You know we talked about another specific item in the treatment for diabetes. Do you remember what it was? That's correct. How many years have you been on the diet? Well, I'm wondering if you would like to talk about what you have been doing about your food.

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
57. When we speak of food we talk about the three main classifications of food. Can you tell me what they are?	57. Carbohydrates Fats Protein		

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
58. What kinds of food would you think to be included in carbohydrates?	58. Fruits, vegetables, cereals, bread, cake, pie, cookies, candy, sugar, soda pop, alcoholic drinks.		
59. Now when we say fats we know and can see the fat say on a piece of steak. What other substances would you include in fat?	59. All kinds of meat fat, bacon, chittlings, butter, margarine, oil, corn oil, peanut oil, cream, mayonnaise		
60. Can you give me at least five foods that contain mostly protein?	60. Milk, cheese, meat, nuts, peanut butter, jello, eggs, fish, fowl.		
61. Can you tell me the amounts of each of the above foods that the doctor has prescribed for you?	61. May give exact number of carbohydrates, fats, and proteins or give in terms of household measurements. (Check answer with information on front page.)		
62. Do you feel that it is necessary for you to eat the exact same kind of food every day?	62. No, this is not necessary.		
63. Can you tell me how you can avoid having what we call a "monotonous diet" or eating the same foods every day?	63. By substituting foods of equal value for the ones listed on the same diet.		
64. Do you know where you can get help in this matter of food exchange or substitution?	64. Secure food exchange lists from the dietitian here in the clinic or write to American Diabetes Association, New York. Call Wayne County Medical Society for address of Detroit Diabetic Association.		
65. Do you feel that you need special equipment such as a "diabetic scale" that you see advertised every once in a while in the papers?	65. No		
66. What can you use to measure your food?	66. Ordinary standard eight ounce measuring cup and a standard measuring teaspoon and tablespoon.		

QUESTIONS	ANSWERS	PATIENT'S RESPONSE
67. Do you feel that it is necessary for you to cook your food in pots and pans separate from the rest of the family?	67. No--If answers yes, ask why and note.	
68. (If previous answer is yes.) Can you tell me how it is or might be possible to cook your food with that of the rest of the family?	68. Cook your portion with family's. Remove your portion before butter, flour, or sauce is added to the rest.	
69. Is it permissible for you to accept invitations to dinner at your friends' homes or eat in restaurants ?	69. Should be yes. If no--Ask: Do you think it would be possible or permitted for you to do this?	
70. Can you tell me how you are able to stay on your diet and still eat out?	70. Select foods permitted in your diet in approximate amounts permitted. See that no sugar, butter, gravy or sauce is added to your portion.	
71. Can you tell me the best ways to cook or fix meat or fowl--say chicken?	71. Bake, boil, or broil	
72. Do you know why these are the best ways to cook meat or fowl?	72. You don't use extra butter or fat when cooking them this way.	
73. Why do you think that the doctor put you on a diet and wants you to stay on it every day and at every meal?	73. So that by controlling the amount of food you eat, he knows how much insulin to prescribe. Being on a diet also controls your weight and this is important in controlling diabetes.	
74. Can you give me 10 foods which people who do not have diabetes often eat which you should not eat?	74. Regular sugar, candy, soda pop, pies, cakes, fried, scalloped or creamed foods, beer, wine, or other alcoholic beverages.	
75. Are there some candies, pop, and ice cream that you can eat?	75. Yes, that labeled diabetic--made with saccharine.	

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
76. Do you understand why the doctor does not encourage you to get these?	76. They are very expensive and on a limited budget, it is better to spend money on essential foods.		

Transition to Category VI Personal Hygiene

We hear on the radio or see on T.V. and in all the papers all these suggestions for people to follow to insure them good health such as having chest x-rays, not being overweight, seeing your doctor at least once a year or if you have a cold that hangs on, also seeing your dentist once a year.

QUESTIONS	ANSWERS	PATIENT'S RESPONSE	
77. (This could be a warm-up.) How do you feel about all this? b. Do you do any of these?	77. A good practice to follow. b. List		
78. Do you think that a person with diabetes needs to take any special precautions or care of themselves?	78. Yes		
79. Can you tell me some items of special care necessary for a diabetic to follow? *If patient answers all--then follow with 80. If not cover material by asking questions but giving the areas to the patient.	79. 1. Avoid gaining weight. 2. Care of feet. 3. See doctor right away when you have a cold or sore throat or boils. 4. Be careful and avoid getting cut. 5. See an eye doctor once a year. 6. Practice good oral hygiene. 7. Good general cleanliness.		
80. That's very good, you gave the most important areas of care. Now let's see just what we can do in each instance to help keep well. For example, what can you do to keep your weight down to what is considered correct for you?	80. Stay on my diet. Do not cheat by eating snacks.		

QUESTIONS	ANSWERS	PATIENT'S RESPONSE
81. Why do you think we keep talking about your need to reduce your weight or if you are at a correct weight, not to gain weight?	81. Reduction of excess weight may result in improvement of his condition. It can mean decreased sugar in the blood and urine or a decreased need for insulin.	
82. Do you know that some patients are able to control their diabetes through diet alone. What does this mean?	82. That if you stick right to your diet all the time, you do not have to take insulin.	
83. Can you tell me what we mean by "taking care of your feet"?	83. 1. Keep them clean and dry. 2. Do not cut corns or calluses. 3. Care when cutting toenails and cut them straight across. 4. Wearing shoes and stockings that fit and are large enough.	
84. Do you know why we emphasize care of the feet and tell you not to get cuts or blisters on them?	84. When you have diabetes you have poor circulation. This is often present in the lower extremities so that there is poor healing and the danger of gangrene and the foot or toe has to be cut off.	
85. Why do we ask you to see your doctor if you have a bad cold or an infection?	85. 1. Because it upsets the way you use your food and insulin and you may go into coma. 2. Because you may get worse since people with diabetes don't heal so fast or as good as regular folks.	
86. In order to prevent any of these serious sicknesses, what should you make a practice of doing?	86. 1. Keep your appointments with your doctor. 2. Stay on your diet and insulin dosage. 3. Tell him if you have a cold, a sore, or a change in vision.	

Transition to Category VII Attitudes

I think we have covered the major things that you as a diabetic should know about diabetes and insulin and how to give yourself insulin and what to do about your diet and a few items about personal hygiene. Now I want to ask just a few more general questions before we finish.

QUESTIONS	ANSWERS	PATIENT'S RESPONSES
87. You know it is suggested that people with diabetes carry a card with them that identifies them as a diabetic. How do you feel about this?	87. Good idea.	*Note--Interviewer please evaluate attitude revealed as favorable, unfavorable, satisfactory, or unsatisfactory. Circle word best describing patient's attitude.
88. If your son or daughter had diabetes, would you want them to carry such a card?	88. Yes	
89. (Change of wording in this question if response to 87 and 88 is negative) Can you tell me why you think this is a good idea? B. Even if you don't approve of carrying a card, can you tell me why it is considered the wise thing to do?	89. A & B. It tells people that you are a diabetic. They will know better how to treat you if you faint or become unconscious. It tells them when you take your insulin and what kind and how much you take.	
90. Incidentally do you have one of those cards with you?	90. Yes	
91. Do you think that in general people want to be friends with diabetics?	91. Yes	
92. What do you think about people with diabetes getting married?	92. All right if both parties know.	
93. How would you feel about telling the person that you were going to marry that you have diabetes?	93. They need to be told.	
94. Do you work--I mean have a job or do the housework?	94. May say laid off but does give evidence of working.	
95. Do you think it is all right for diabetics to hold a job?	95. Yes	

QUESTIONS	ANSWERS	PATIENT'S RESPONSE
96. What would your reaction be or how do you feel about a person who knows that he is a diabetic but who goes out and drinks a lot of beer or whiskey?	96. Is foolish and will get real sick.	
97. Do you think that it is all right for people with diabetes to play golf or ball or swim ?	97. Yes.	
98. Are there any precautions they should take?	98. Not over do. May need to have doctor adjust diet.	
99. Do you feel that your chances for living to a ripe old age are just as good as the next person's?	99. Yes.	
100. What do you need to do to insure your living to a ripe old age?	100. 1. Stay on diet 2. Take insulin 3. See doctor regularly 4. Go to see doctor for care when you are just slightly ill or have just a small sore.	

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Title: SEX KNOWLEDGE QUESTIONNAIRE

Author: Reichelt, Paul A., and Werley, Harriet H.

Variable: Sex knowledge with an emphasis on knowledge of contraceptives is the variable under study.

Description:

Nature and Content: This 44-item questionnaire was designed for use with the layperson. The first two items have multiple parts and are designed to elicit information about the source of the respondent's knowledge of sexuality. The 42 remaining items include three attitude questions, but, primarily, they cover general knowledge of human sexuality (6 items) and knowledge about specific areas of sexuality, i.e., venereal disease (5 items); menstruation (2 items); the birth control pill (6 items); the diaphragm (4 items); the condom (4 items); the intrauterine device (4 items); spermicides (5 items); and abortion (3 items). Each of these 42 items is to be answered by circling a T for True, an F for False, or DK for Don't Know.

The items have been worded so as to be easily understood by adolescents, while at the same time avoiding the use of any subcultural slang (Reichelt and Werley, 1975a).

Administration and Scoring: No special provisions are necessary for administration of this test other than that the area should be quiet and well lighted. The questionnaire requires approximately 10 minutes to complete and has been used successfully with respondents as young as 13 years of age.

The items are scored in terms of general correctness.

The three-part response scale allows the scorer to distinguish between lack of information and misinformation. Scores are tallied by the number answered correctly, the number answered incorrectly, and the number marked unknown by the respondent. Various scales can be derived such as the number answered correctly; number answered correctly minus number answered incorrectly, with zero weight for "don't know" responses; a subscale for each content area; and so forth.

Development:

Rationale: No underlying conceptual theory was identified by the authors.

Source of Items: The items were based upon the authors' review of related scientific literature and their professional experience.

Procedure for Development: The authors stated that there had been a preliminary testing of the instrument to insure the clarity of the items (Reichelt and Werley, 1975a).

Content validity was established by deriving the items from available scientific literature and having the instrument reviewed by a panel of health profession experts (Reichelt and Werley, 1975a).

The discriminatory power of the instrument is demonstrated by the fact that persons who have received education in the content area score better as a group than persons who have not received such instruction (see research noted below).

Use in Research: This instrument was used by Werley and Reichelt to collect data for their study evaluating the sex education program for teenagers at the Youth Education on Sex (YES) Teen Center operated by the Planned Parenthood League, Inc. of Detroit. The results of the study are reported in their articles "A Sex Information Program for Sexually Active Teenagers" (1975) and "Contraception, Abortion, and Venereal Disease: Teenagers' Knowledge and the Effect of Education" (1975).

The study sample included 1,190 respondents (148 males, 1,042 females) who were required by the Planned Parenthood League to attend a discussion session prior to obtaining medical family planning services.

Comments: Though developed primarily for adolescent laypersons, the instrument could easily be adapted for use with adults and/or professional groups. However, the potential user must remember that this test is not intended to be a comprehensive, in-depth assessment of sexual knowledge. Reliability data should be developed; the form and content of the instrument suggest that reliability could be established with little difficulty.

References:

Reichelt, Paul A., and Werley, Harriet H. A sex information program for sexually active teenagers. *The Journal of School Health,* 1975a, *45* (2), 100–107.

______. Contraception, abortion, and venereal disease: Teenagers' knowledge and the effect of education. *Family Planning Perspectives,* 1975b, *7* (2), 83–88.

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Instrument Copyright: None.

Reichelt, Paul A., and Werley, Harriet H.

SEX KNOWLEDGE QUESTIONNAIRE

Have you ever had serious conversations about sex, birth control, pregnancy, or human sexuality with: (CIRCLE YES OR NO FOR EACH PART OF THE QUESTION.)

Yes No--your parents?
Yes No--a teacher or school counselor?
Yes No--a clergyman?
Yes No--a doctor?
Yes No--a nurse?
Yes No--a male friend?
Yes No--a female friend?
Yes No--other (Write in) ____________________

What is the main source of your information about sex, birth control, pregnancy, or human sexuality? (CHECK ONLY ONE ANSWER.)

_____friends
_____books, magazines, newspapers, movies, etc.
_____parents
_____teachers or school counselors
_____other (Write in) ____________________

The following are all statements concerning human sexuality. For EACH statement answer True, or False, or Don't Know by circling the T or F or DK in front of the statement.

T F DK I don't know as much as I would like to know about birth control.

T F DK Rhythm is a highly effective method of birth control.

T F DK A girl can get pregnant the first time she has intercourse (makes love).

T F DK Douching after intercourse is a highly effective birth control method.

T F DK Sperm can live in the female's reproductive system for about 72 hours (3 days).

T F DK Oral-genital sex (mouth-sex organ contact) is a common practice.

T F DK If a woman does not have an orgasm (climax) during intercourse, she can't get pregnant.

T F DK Withdrawal (pulling out) is a highly effective method of birth control.

T F DK Swallowing sperm can make a woman pregnant.

Venereal Disease (VD)

T F DK Many cases of VD are caught by contact with toilet seats, drinking fountains, and swimming pools.

T F DK If the symptoms of VD disappear by themselves, no treatment is needed.

T F DK Once you've had VD, you can't get it again.

T F DK VD is not really dangerous to your health.

T F DK Minors can be treated for VD in (name of state) without permission from their parents.

Menstruation (monthly period)

T F DK Menstruation is a clearing of the uterus (womb) to prepare again for possible pregnancy.

T F DK A woman's fertile time (when she is most likely to become pregnant) covers the middle of the interval between her menstrual periods.

The birth Control Pill

T F DK The pill must be stopped every year for three months.

T F DK The pill is generally dangerous to use.

T F DK The pill may be taken along with other medications without decreasing its effectiveness.

T F DK The pill may be taken by a girl who uses alcohol and/or drugs.

T F DK The pill may not be taken if the woman has a history of certain illnesses.

T F DK The pill is the most effective method of birth control.

The Diaphragm

T F DK The diaphragm must be worn at all times.

T F DK A diaphragm should be used only after having been fitted for it by a doctor.

T F DK The effectiveness of the diaphragm is increased when used with a cream or jelly.

T F DK The diaphragm cannot be felt by either the man or woman when properly in place.

The Condom (rubber)

T F DK Using a rubber can help prevent the spread of venereal disease.

T F DK A rubber should be tested before use.

T F DK Rubbers break easily.

T F DK The rubber should be held around the base of the man's penis when withdrawn.

The I. U. D. (intrauterine device, such as the loop or coil)

T F DK The I. U. D. is inserted before each act of intercourse(making love).

T F DK The I. U. D. cannot be felt by the man or woman during intercourse.

T F DK The I. U. D. is the second most effective method of birth control.

T F DK The I. U. D. usually works best if the uterus (womb) has been stretched by a previous pregnancy.

Foams, Creams, & Jellies

T F DK They should be inserted just before each intercourse.

T F DK They work by killing sperm.

T F DK They can be bought without a prescription in any drug store.

T F DK When used with a rubber, they are a highly effective birth control method.

T F DK They should be washed out with a douche immediately after intercourse.

Abortion

T F DK An abortion can be done safely and easily by a doctor during the first 12 weeks of pregnancy.

T F DK Having an abortion will make the woman sterile (unable to have children in the future).

T F DK Anyone can tell if a girl has had an abortion.

Client Affective Variables: General

Title: LABOR AND DELIVERY TOOL

Author: Aguiar, Martha B.

Variables: A postpartum patient's perceptions of her labor and delivery experience and her general knowledge of pregnancy, labor, and delivery are the variables studied.

Description:

Nature and Content: This self-administered, 41-item instrument is divided into four parts. Part A contains two items—one concerning the patient's general educational background and another related to attendance of prenatal classes. Part B contains five open-ended items, Part C contains 25 attitude statements related to the subject's labor and delivery experience, and Part D contains nine multiple-choice knowledge items related to pregnancy, labor, and delivery. Eight of the items have four answer choices and one has five possible choices.

Administration and Scoring: The instrument requires no special skills or provisions for administration. Directions for completion of each section precede that section of the instrument.

The author estimated that approximately 15 minutes were required for completion of the instrument, though no time limits were imposed.

For scoring of parts C and D, the following information was provided:

> Each item is scored by the investigator in the following way: the most positive answer receives 5 points; the next most positive answer receives 4 points; the next most positive, 3 points, and down to 1 point for the least positive answer. An empty space receives a zero. For Part D a positive score is given for each completely correct answer (Moore-Nunnally and Aguiar, 1974).

No other scoring information was provided.

Development:

Rationale: The author stated that the instrument was based upon Greenwald's (1968) theory of attitude formation.

Source of Items: The items were based upon a review of literature and discussions with nursing staff members, graduate nursing students, graduate nursing faculty members, and a perinatal nurse specialist.

Procedure for Development: A preliminary form of the questionnaire was pretested with five patients and several graduate nursing students. Following that pretest, revisions were made, and, prior to its administration, the final instrument was critiqued by a perinatal nurse specialist and an associate professor of sociology.

Reliability and Validity: No reliability data were provided.

Content validity was attended to by having the instrument reviewed by those persons identified in the section, Procedure for Development. Some evidence of construct validity for Part C and Part D is provided by group differences in the scores on these sections of two groups of subjects. In the Moore-Nunnally and Aguiar (1974) study, mean scores of 25 women who had attended prenatal classes were significantly higher ($p < 0.05$) than the mean scores of 25 women who had not attended prenatal classes. Prenatal class attenders also had a significantly more positive overall attitude toward labor and delivery ($p < 0.05$) than women who had not attended prenatal classes.

Use in Research: The development and use of the instrument is described in Moore-Nunnally and Aguiar's (1974) article "Patients' Evaluation of Their Prenatal and Delivery Care" and Aguiar's (1974) master's thesis referenced below.

Comments: This instrument was developed by Aguiar for a study designed to evaluate patients' responses to their labor and delivery experience based upon attendance or nonattendance at prenatal classes and to test whether or not learning took place among the patients who attended versus those who did not.

Work to establish its reliability and validity is needed as is attention to other facets of the instrument. For example, information is needed on the categorization and scoring of the open-ended statements; scoring for Part C needs to be refined—as it now stands it would appear that no one would be assigned a score of 0 for an answer; some of the items on the knowledge test appear to have more than one correct answer. Each of the items should be critically tested to determine how each correlates with the total score. Such an item analysis might show that some of the items could be eliminated. The instrument's content could be more accurately identified by a change of name, e.g., Attitudes Toward and Knowledge of Pregnancy, Labor and Delivery Tool.

References:

Aguiar, Martha B. *The effect of prenatal education upon the knowledge and attitudes of 50 postpartum women.* Unpublished master's thesis, University of Oregon, 1974.

Greenwald, A. Cognitive learning, cognitive response to persuasion and attitude change. In *Psychological Foundation of Attitude*, New York: Academic Press, 1968, 147–168.

Moore, D., and Cook-Hubbard, K. Comparison of methods for evaluating patient response to nursing care. *Nursing Research*, 1975, *24* (3), 202–204.

Moore-Nunnally, D., and Aguiar, Martha. Patients' evaluation of their prenatal and delivery care. *Nursing Research*, 1974, *23*, (6), 469–474.

Source of Information:

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Instrument Copyright: None.

Aguiar, Martha B.

LABOR AND DELIVERY TOOL

Dear Mother:
I am interested in finding out what you know and how you feel about your labor and delivery. Your name will not be used so please be frank in your answers.

Part A.

Please circle the last year of school which you completed:

Grade School	1	2	3	4	5	6	7	8
High School	9	10	11	12				
College	13	14	15	16				
Graduate	17	18	19					

Please circle the numbers of any prenatal classes offered at the clinic which you attended:

Class I   Class II   Class III   Class IV   Class V

Part B. Open-Ended Statements

Directions: Please finish the following statements with the first thing that comes to mind.

1. My labor and delivery was ______________________________.
2. During labor I wish I had ______________________________.
3. I knew I was in labor when ______________________________.
4. The prenatal classes offered at the clinic are ____________.
5. My mother said that labor and delivery would be ___________.

Part C.

Directions: Answer each item in terms of your own labor and delivery. Read each of the statements below and rate each one with a 'strong yes', 'yes', 'no', or 'strong no.'
Please check (X) in the space provided which reaction comes closest to saying how you feel about each statement.

	Strong Yes	Yes	No	Strong No
1. I wish I had been asleep during labor and delivery.				
2. The doctor was always there when I needed him.				
3. I feel badly about my labor and delivery.				
4. My husband should be proud of me.				
5. Nothing seemed to help the pain.				
6. I am not afraid to have another baby.				
7. I was not sure of where to go when I came to the hospital in labor.				
8. I was interested in reading the pamphlets given to me in the clinic.				
9. The pain I felt was not unbearable.				
10. I would like to take care of my baby while in the hospital.				
11. The delivery room frightened me.				
12. The nurses were attentive.				
13. I asked questions about my progress during labor and delivery.				
14. I was well prepared for my labor and delivery.				

	Strong Yes	Yes	No	Strong No
15. I wish that men had babies to so we women would not have to go through labor and delivery.				
16. If women have some idea of what labor is like, they'll have an easier time.				
17. I lost control of myself during labor and delivery.				
18. There is really nothing a woman can do to help herself during labor and delivery.				
19. I wish I had practiced my breathing exercises more often.				
20. No matter what anyone says, childbirth is a very painful experience.				
21. If I become pregnant again, I will go to pregnancy classes.				
22. No one told me anything during my labor and delivery.				
23. The doctors and nurses helped relieve my discomfort.				
24. I wish I had had my baby in a private hospital.				
25. The breathing techniques were a waste of time.				

Part D

Direction: The following items or incomplete statements concern pregnancy, labor and delivery. Please circle the word or words that complete the statement or answer the question.

1. Your ovary releases an egg________days before a menstrual period.
   A. 6
   B. 10
   C. 14
   D. 18
   E. 22

2. Warning signs of danger during pregnancy are:
   A. vaginal bleeding
   B. occasional headaches
   C. pain in lower abdomen
   D. blurred vision

3. Good dental care during pregnancy should include:
   A. a toothbrush with medium to soft bristles
   B. dental flossing between teeth before brushing.
   C. downward stroke on upper teeth and upward stroke on lower teeth
   D. brushing once each day, preferably before bed

4. Good body mechanics:
   A. includes using your legs to do the work in lifting
   B. includes rising from bed to one's feet in one quick motion
   C. are only important during pregnancy
   D. includes using your back to do the work in lifting

5. Breathing techniques used in early labor when contractions are mild include:
   A. tapping out a song with the fingertips
   B. shallow rapid breathing
   C. slow deep chest breathing
   D. breathing in through the mouth and out through the nose

6. Learning to relax during labor:
   A. is only important for people planning natural childbirth
   B. will allow your uterus to work more freely and efficiently
   C. involves practice before going into labor
   D. is something that comes naturally to most women

7. Signs of true labor are:
   A. contractions starting in front
   B. contractions regular in interval
   C. contractions stop when you move around
   D. bloody show from the vagina

8. It is important to use Level C breathing or panting in the delivery room because:
   A. uncontrolled pushing could injure the baby's eyes
   B. the breathing causes the medication to work faster
   C. the breathing prevents dizziness
   D. uncontrolled pushing could cause the mother to tear

9. Anesthetics which cause a loss of feeling but do not put you to sleep during labor and delivery include:
   A. caudal
   B. paracervical
   C. inhalation or general anesthesia
   D. morphine

Title: ANXIETY DUE TO TERRITORY AND SPACE INTRUSION QUESTIONNAIRE

Author: Allekian, Constance I.

Variable: The variable is anxiety which results from territorial and personal space intrusions. The author defines these terms as follows:

Anxiety—an experience which can be described affectively, such as uneasiness, embarrassment, or annoyance.

Territory—an area of the hospital room which is claimed by the patient.

Personal space—an area extending outward to a distance of four feet from the person's body.

Intrusion—unsolicited entrance and activity or contact (Allekian, 1973).

Description:

Nature and Content: This is a 27-item, 5-point, fully anchored rating scale divided into two parts. Part I contains 15 items designed to determine patients' feelings about territorial space intrusions; Part II contains 12 items designed to determine patients' feelings regarding personal space intrusions by health care personnel. Each item refers to a hypothetical situation, e.g., "Your door is closed and a nursing assistant enters without knocking" (item 1, Part I); "While you are lying in bed, the nurse leans over you and you feel her breath against your face as she talks" (item 1, Part II). For Part I, response choices are (1) pleased, (2) agreeable, (3) indifferent, (4) annoyed, and (5) very annoyed; for Part II, response choices are (1) pleased, (2) agreeable, (3) indifferent, (4) uneasy, and (5) embarrassed.

Administration and Scoring: The instrument can be self-administered. If the patient is unable to read or write, the items and response choices may be read to the patient and the patient's verbal responses recorded by the administrator. Administration of the questionnaire requires approximately 20 minutes. It is highly desirable to insure that individual patient's responses, per se, do not become known to the health care personnel.

The possible responses to each item are given a numerical score of from 1 to 5 as follows:

Part I	Part II
Pleased—1	Pleased—1
Agreeable—2	Agreeable—2
Indifferent—3	Indifferent—3
Annoyed—4	Uneasy—4
Very annoyed—5	Embarrassed—5

According to the author, responses marked 1 or 2 are considered favorable, a response of 3 is considered neutral or embodying no emotional reaction, and a response of 4 or 5 indicates the presence of anxiety.

Development:

Rationale: Following Robert Ardey's theory of territoriality, it is proposed that an individual's needs for security and identity may be threatened by intrusions. Such instrusions may produce annoyance or anxiety. Similarly, according to recent hypotheses formulated by Irene Beland, Kenneth Little, and others, intrusions of personal space (one's body and immediate surroundings) may produce unease or embarrassment. It is thought that patients are likely to be especially affected by such intrusions, because they have little control over their hospital situations and because hospital personnel may easily intrude upon the patient's territory and personal space in the course of performing routine duties.

Source of Items: The items were derived from the theories of territoriality and anxiety found in the published literature and the professional experience of the author.

Procedure for Development: No information was provided other than that the response alternatives for each item were carefully selected on the basis of J. R. Davitz's analysis of terminology used to describe anxiety (Allekian, 1973).

Reliability and Validity: No information was provided.

Use in Research: The instrument was developed by Allekian for her study "Intrusions of Territory and Personal Space" (1973). The purpose of her study was to determine whether intrusions of territory and personal space were anxiety-producing factors for the hospitalized person.

Seventy-six adult patients in four metropolitan Chicago hospitals participated in the study. Three hospitals were general acute care facilities; the fourth was an extended care facility for long-term patients with chronic conditions. The sample population for the study was selected according to the availability of patients who were lucid and responsive, not critically or seriously ill, confined to bed or room, and were willing to participate in the study.

Comments: Since the instrument was developed for use in a particular exploratory study, each researcher who contemplates using it should review each item carefully and judge its quality and value for the purposes of his(her) project. Many items are complex, e.g., item 13, Part I, "The cleaning woman rearranges your personal belongings on the bedside stand without asking you how you would like them arranged"; if the patient responds, "Annoyed," it could be annoyance at the rearrangement or the fact that it was done without asking. Other items may not be applicable to all patients, e.g., item 3, Part I, "You prefer to have your door closed but the nurse always leaves it open when she leaves the room"; some patients may not prefer to have their door closed. This problem could be addressed by rewording the items which fall into this category into simple declarative sentences. Conceptually, one might question whether annoyance and embarrassment (the response choices) can be equated with anxiety (the variable).

The reliability and validity of the instrument should be determined for any proposed study.

References:

Allekian, Constance. Intrusions of territory and personal space. *Nursing Research*, 1973, *22* (3), 236–241.

______. Intrusions of territory and personal space: An exploratory study of anxiety-inducing factors in hospitalized patients. *International Journal of Psychiatry in Medicine*, Winter 1974, *5* (1), 27–39.

Source of Information:

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Allekian, Constance I.

ANXIETY DUE TO TERRITORY AND SPACE INTRUSION QUESTIONNAIRE

This questionnaire was developed for the purpose of obtaining information as to how hospitalized people feel about various situations that normally occur in the hospital.

The responses to the questionnaire will be confidential.

Please indicate your:

age ______ sex ______ family size ______

country of national origin ________________ place of birth ______________

length of stay in the hospital _______________

Directions:

Read each of the situations described below. In the list of possible responses to the right of each situation, place an X on the line in front of the word which best describes how you might feel.

Definitions: nurse: an R.N. or an L.P.N. (Licensed Practical Nurse)
nursing assistant: an aide or orderly

Part I

1. Your door is closed and a nursing assistant enters without knocking.
    ___1. pleased
    ___2. agreeable
    ___3. indifferent
    ___4. annoyed
    ___5. very annoyed

2. While you are sitting in your chair, the aide sits on your bed while conversing with you.
    ___1. pleased
    ___2. agreeable
    ___3. indifferent
    ___4. annoyed
    ___5. very annoyed

3. You prefer to have your door closed but the nurse always leaves it open when she leaves your room.
    ___1. pleased
    ___2. agreeable
    ___3. indifferent
    ___4. annoyed
    ___5. very annoyed

4. The nursing assistant talks in an unusually loud voice while working in your room.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

5. Your bedside stand is moved to a position where it cannot be easily reached by you.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

6. The nurse removes a chair from your room without asking whether you will be using it.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

7. While you are lying in bed, the nurse bumps the bed as she walks by it.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

8. The window in your room is opened or closed without asking your preference.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

9. Without asking your permission, the nurse looks through your personal belongings in your drawer.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

10. The window shades in your room are raised or lowered without asking your preference.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

11. The nurse sits on your bed while talking to you.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

12. An orderly opens the door to your room and enters without knocking.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

13. The cleaning woman rearranges your personal belongings on the bedside stand without asking you how you would like them arranged.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

14. The nursing assistant enters your room and begins to move your bed while you are in it.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

15. The nurse speaks in an unusually loud voice while talking with you.

___1. pleased
___2. agreeable
___3. indifferent
___4. annoyed
___5. very annoyed

Part II

1. While you are lying in bed, the nurse leans over you and you feel her breath against your face as she talks.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

2. The nursing assistant stands close to the head of your bed when talking with you while you are lying down.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

3. While you are sitting in a chair, the nurse comes close to you and puts her hand on your shoulder while she talks with you.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

4. The doctor sits close to you on your bed while talking to you.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

5. The nursing assistant holds your hand for a few minutes after putting a thermometer in your mouth.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

6. After asking you some questions, the doctor begins to examine you by feeling and listening to different parts of your body.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

7. The nurse administers a treatment to a more personal area of your body.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

8. The nurse holds your hand while talking with you about your activities for the day.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

9. While you are lying in bed, the nursing assistant leans over you in the process of making your bed.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

10. The orderly places his hand on your arm while talking to you.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

11. The doctor takes your hand in his while you are telling him about a problem.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

12. The aide approaches you in your room and puts her arm around you while talking with you.

___1. pleased
___2. agreeable
___3. indifferent
___4. uneasy
___5. embarrassed

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Title: ATTITUDES TOWARD CONTENT AND TIMING OF SEX EDUCATION (SECT-Attitudes) ATTITUDES TOWARD SEX EDUCATION IN SCHOOLS (SES-Attitudes) **Note:** These two instruments were developed to be used jointly.

Author: Bloch, Doris

Variables: The variables measured are attitudes toward two partially independent facets of attitudes toward sex education, namely, attitudes toward the content and timing of sex education and attitudes toward sex education in school.

Description:

Nature and Content: Each instrument is a 10-item, self-administered, Likert-type scale which contains attitudinal statements to which the respondent indicates whether he(she) agrees, disagrees, or is undecided. An example of a "content" item is "Children should be allowed to see their pets mate." An example of a "timing" item is "When a 5-year old asks how babies get out of the mother, he should be told he is too young to know." An example of a "school" item is "Schools should take the lead in teaching the facts of life."

Administration and Scoring: The scales were designed to be self-administered; however, they can be read to the respondent if the respondent is unable to read. The respondent circles A for agree, D for disagree, and U for undecided. The instruments are prescored (2 points for the liberal or favorable answer, 0 points for the conservative or unfavorable answer, and 1 point for undecided); however, these numbers should be removed from the instruments prior to self-administration. Each instrument is scored by summing the scores on all 10 items. The possible range of scores is from 0 (most conservative or most unfavorable) to 20 (most liberal or most favorable). A high score on the SECT scale represents "liberal attitudes" and a low score represents "conservative attitudes." A high score on the SES scale represents "favorable attitudes" and a low score represents "unfavorable attitudes."

The two instruments may be administered as one, but they must be analyzed separately, since the two variables measured—although related—are conceptually and empirically distinct. Administration of each tool requires approximately 5–10 minutes. The tools were found suitable for use with adults of the whole spectrum of socioeconomic levels (Bloch, 1970).

Development:

Rationale: The instruments are not based on any specific theory. They are, however, based on the author's hypothesis that the two components of sex education attitudes are conceptually and empirically distinct.

Source of Items: The items were based upon a review of the literature, attitude scales developed by other investigators, interviews with parents with different beliefs about sex education, and interviews with professionals in health care and education.

Procedure for Development: A set of 160 Sex Education Content and Timing-Attitude statements were collected to cover the following subcategories: general statements, statements about male-female anatomy, menstruation, seminal emission, pregnancy, birth, coitus, contraception, venereal disease, and masturbation. A Thurstone-type model was used, but was not considered successful; however, based on a broad range of Q-values, appropriateness of content, simplicity of wording, and sound sentence construction, it did lead to the selection of 26 items.

To develop the Sex Education in Schools-Attitude scale, 26 statements were collected by adaptation of items from older scales, from statements in the popular press, from professional journals, and from interviews with mothers.

The 52 items for the 2 components were then intermingled, pretested with mothers in a small series of pilot studies, changed as needed, and administered to 124 mothers of 12-year-old girls in a larger study. The data for each component were then subjected to item analysis.

This resulted in the 2 scales, each consisting of the 10 items which had been found to correlate highest with the total score on each component.

Reliability and Validity: No test-retest reliability information was available for these instruments. Split-half correlations for the two instruments were 0.70 (SECT) and 0.91 (SES).

Approximately half of the respondents had a high score (15–20) on both of these variables. Approximately 10 and 20 percent, respectively, had low scores (0–8) on these two variables. There was a significant positive relationship ($p < 0.005$) between these two variables. However, only about 8 percent of the variance of one was shared by the other ($r = 0.28$).

Use in Research: The development and use of these instruments is described in Bloch's (1970) doctoral dissertation referenced below. Bloch's study showed that the two components of sex education attitudes are partially independent: a sizeable proportion of mothers with liberal attitudes toward content and timing held unfavorable attitudes toward sex education in school, and the reverse was also true. Liberal SECT-Attitudes were associated with relatively extensive sex education practices.

Comments: These instruments appear to have potential for obtaining information about the variables they were developed to measure. They appear to be simple, straight-forward, easily administered, and applicable to a wide range of socioeconomic and educational levels. However, any potential user should examine each instrument carefully and judge its suitability for his(her) study population. This is especially important as far as words and terms are concerned.

It would be helpful to have information on the test-retest characteristics of the variables. It would also be helpful to have information regarding the inter-item characteristics of the 52-item version of the instrument. Such information could indicate the presence of measures other than those identified by the author, as well as confirm the item selection made by the author.

It would also be useful to have information regarding the relationship between these variables and subsequent events that happened to the children of mothers who responded to this instrument. It would be useful to expand this information to mother-son and father-son situations.

Finally, it would be useful to have results based on a much larger sample of parents and children.

References:

Bloch, Doris. *Attitudes and practices of mothers in the sex education of their daughters.* Unpublished doctoral dissertation, University of California, Berkeley, 1970.

Bloch, Doris, and Derryberry, M. Effect of political controversy on sex education research: A case study. *The Family Coordinator*, 1971, *20* (3), 259–264.

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Bloch, Doris

ATTITUDES TOWARD SEX EDUCATION IN SCHOOLS (SES ATTITUDES)
ATTITUDES TOWARD CONTENT AND TIMING OF SEX EDUCATION (SECT ATTITUDES)

In order to learn something about the opinions mothers have about teaching children the facts of life, we have made up 20 statements. Each one has some sort of an opinion in it. For each statement I would like you to decide whether you agree with it or not, or whether you are undecided. So you have three possible answers: 1: Agree, 2: undecided or not sure, or it depends, and 3: Disagree.

(IF INDICATED)
Read each statement carefully and then circle A for agree, U for undecided, and D for disagree.

(IF INDICATED)
Would you like me to read them to you again?
If there is anything that is not clear to you, be sure to stop me, and I will be glad to read it again.

ATTITUDES TOWARD SEX EDUCATION IN SCHOOL

(SES ATTITUDES)

1.	A U D 2 1 0	Teaching the facts of life in school is as important as teaching reading, writing, and arithmetic.
2.	A U D 2 1 0	Children should learn about the facts of life as part of their regular work in school.
3.	A U D 0 1 2	When the facts of life are taught in school, children are given too much information when they are too young.
4.	A U D 2 1 0	When children are given a good sex education in school, they will make wiser decisions when they grow up.
5.	A U D 2 1 0	The facts of life should be taught in school, so that children get the proper information.
6.	A U D 2 1 0	Schools should take the lead in teaching the facts of life.
7.	A U D 2 1 0	Boys and girls should be together in classes where the facts of life are taught.
8.	A U D 0 1 2	Teachers are too overworked to teach sex education in addition to all their other duties.
9.	A U D 2 1 0	If the facts of life are taught in school, children learn that sex is a normal part of life.
10.	A U D 0 1 2	Classroom discussion about sex will stimulate too much interest in raw sex.

A = Agree

U = Undecided

D = Disagree

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ATTITUDES TOWARD CONTENT AND TIMING OF SEX EDUCATION (SECT ATTITUDES)

1. A U D Children should not be told about intercourse until
0 1 2 they are at least 12 years old.

2. A U D If a child of 6 asks where babies come from, he should
0 1 2 be told: "From God; He lets a little seed grow under
mother's heart."

3. A U D Children should be taught that playing with themselves
0 1 2 is a bad habit.

4. A U D Children should be told that women have to be married
0 1 2 to have babies.

5. A U D Children should be allowed to see their pets mate.
2 1 0

6. A U D Parents should teach their children not to talk about
0 1 2 the facts of life with other children.

7. A U D If a young child asks how the baby got inside the mother,
0 1 2 it's best to change the subject.

8. A U D Children should only be told about the facts of life
0 1 2 when they ask questions.

9. A U D A child who wants to know how babies get out of the
2 1 0 mother should be told the truth, no matter how young
he is.

10. A U D When a 5-year-old asks how babies get out of the mother,
0 1 2 he should be told he is too young to know.

A = Agree

U = Undecided

D = Disagree

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Title: PARENTAL SEX EDUCATION PRACTICES INTERVIEW, PARENTAL SEX EDUCATION PRACTICES CHECKLIST

Author: Bloch, Doris

Variable: The level of sex education provided by a parent to a child is the variable under study. *Level of sex education* is operationally defined by a parent's responses to the items in the semistructured interview or the responses to the items in the checklist. Emphasis is on the extent of the parent's teaching rather than its scientific accuracy.

Description:

Nature and Content: Both the interview and the 14-item checklist address three components of sex education: (1) menstruation, (2) father's role in reproduction, and (3) birth control. The interview is semistructured with specific questions and probes identified. A detailed scoring guide for the interview has been developed. An example of an interview item is: "Have the two of you ever talked in any way about what makes a baby start growing, about the father's part in having a baby?" The accompanying probe is: "Have you ever had a chance to talk to her about the sperm or the seed from the father?" On the checklist, the parent indicates whether each subject identified on the checklist has or has not yet been discussed.

An example of a checklist item is: "How often women have a period and how long it lasts," for which the parent checks either the "talked about" or "not yet talked about" column.

Administration and Scoring: The *interview* must be conducted by a highly skilled, sensitive, experienced interviewer in a quiet place where interruptions are at a minimum. The interview was designed to allow the respondent to talk freely; however, the interviewer should adhere closely to the questions and probes prescribed. The author found it necessary to individualize each interview for a variety of reasons: (1) Some mothers were not very verbal and needed many probes, while others would give a great deal of information in answer to the first question, obviating the need for a number of questions and probes. (2) Some mothers were very uncomfortable during this interview, and at times the interviewer had to bring a great deal of tact and sensitivity into play in order to keep a mother from getting too upset. The goal at all times was to elicit the least amount of information necessary to judge a mother's sex education practices and to do so with a minimal amount of discomfort to the mother.

Since the interview was designed to approximate as closely as possible a Guttman Scale, any component can be terminated if two probes in a row result in negative answers. Probing further might create embarrassment and stress. The length of the interview depends a great deal on the talkativeness of the respondent and may range from 5–30 minutes. The interview must be practiced before accurate data can be collected. Extensive notes should be kept during the interview and should be transcribed immediately after the interview. The author suggested that audiotape recording would be helpful if it were acceptable to the parent without creating additional discomfort. Using the three-part scoring guide provided by the author, the interview content should then be scored by one or more coders. The score for each component consists of the highest level reached and ranges from 1 to 5, with 1 indicating a low level of sex education having been provided, and 5 a high level of sex education having been provided. A score for total sex education level is obtained by summing the three component scores and subtracting a constant of 2, which results in a possible range of scores of 1 (very low) to 13 (very high).

Coders should be trained by practicing on pretest data. Coders are instructed to:

1. Place a respondent in the highest possible category; for example, if it is clear that the parent is at least at level 3, but if there is some evidence that she has touched on an item in level 4, she should be scored 4.
2. Score the *extent* of the parent's teaching, rather than her scientific *accuracy*. The emphasis is on *level of communication* about sex.
3. Avoid the category "insufficient data to score" as much as possible.

In the study for which the tool was developed, the coders were able to proceed without difficulty. No major scoring problems developed, and the scoring guide appeared to be adequate to enable the three coders to make a numeric judgment of the mother's sex education practices from the interview data.

The checklist can be self-administered without difficulty to any parent able to read. It can also be administered to a parent who is unable to read by reading it to her(him).

The checklist is prescored with M representing "menstruation education," F representing "father's part education," and B representing "birth control education." Each component was designed to approach a Guttman-type scale;

therefore, the highest item in each component checked "talked about already" becomes the score for that component. If no item in a component is checked "talked about already," the score for that component is 1. (The precoding symbols should be removed from the instrument prior to administration.)

The total score on the checklist is determined by adding the final score for each of the three sets of items contained in the instrument, and subtracting 2 from the resulting sum. Since the score for each of the three parts can range from 1 to 5, the total score may range from 1 (very low) to 13 (very high).

Development:

Rationale: The tools were designed for use with mothers of 12-year-old girls largely to ascertain the relationship between parental attitudes and practices in sex education. Content was based upon literature on sex education directed to parents and written by acknowledged experts in the field and on the author's belief regarding what represents a realistic, achievable level of sex education for 12-year-old girls. The component "menstruation" was chosen because: (1) many mothers consider it a vital and relatively easy facet of the sex education of girls, (2) it is timely for mothers of 12-year-old girls, and (3) menstruation education, in the author's view, should definitely be completed by age 12. "Father's role" was chosen because many parents consider it the most difficult aspect of sex education. "Birth control" was chosen because parental teaching of birth control by age 12 would represent a considerable achievement in parental sex education.

Source of Items: Components of the interview and checklist were derived from the author's preliminary interviews with parents, from a review of the literature, and from the author's professional experience.

Procedure for Development: Interview: An extensive review of the literature revealed only one instrument for the measurement of the sex education practices of parents (Witmer, 1929).

The author felt that such a checklist-type instrument would be apt to elicit invalid responses in that mothers would be likely to over-report. Therefore, the author decided to utilize an open-ended interview to elicit information from the mother about her sex education practices.

The interview was subjected to a great deal of pretesting, resulting in a number of changes. In the latter part of the pilot study, minor changes in wording were made, but improvement in data collection resulted largely from the interviewer's increasing skill and from the use of probes where appropriate.

Checklist: In the latter stages of pretesting of the interview, it was decided to add a checklist-type instrument to the interview schedule to supplement the open-interview method of obtaining information about sex education practices. A checklist based upon the interview scoring guide was constructed and prescored in order to allow a quick, second measure of judging sex education practices. The mother was asked to complete the checklist immediately following the conclusion of the interview about her sex education practices. The response categories "talked about already" and "not yet talked about" were chosen deliberately over "talked about: Yes—No" in the hope that the wording might be less threatening. The checklist was not pretested before it was used in the pilot study; however, only a few minor changes were made before it was used in final data collection.

The instruments were designed to create a minimum of distress for the respondent.

Reliability and Validity: Interview: No data on inter-interviewer reliability are available. The author and two college students coded all interviews independently. Pearson product-moment correlation coefficients interrater reliability ranged from 0.76 to 0.96. Coders agreed perfectly or differed by one point in from 75 percent to 87 percent of the cases.

Checklist: No reliability coefficients were determined.

Two methods of measuring the sex education practices of mothers were used in the study—the interview method and the checklist method. The author correctly reports that the manner of administration clearly made the two instruments less than independent of each other. Mothers were asked to mark the checklist immediately after the completion of the sex education practices interview. This close association of the two measures may have had a number of consequences. Some mothers probably would not want to contradict in the checklist what they had said in the interview; their checklist would presumably parallel very closely the data obtained in the interview. However, other mothers, already uncomfortable after the practices interview which had in many cases clearly elicited inadequacies in their sex education practices, might grasp at the opportunity offered by the checklist to improve upon the picture of their sex education practices previously presented to the investigator. This is to say, then, that the data obtained by means of the checklist were undoubtedly influenced by the preceding interview. Results obtained from a checklist administered without a prior practices interview might well result in different data. The practice interview, however, was independent from the checklist and from any other measures included in the study.

Mothers were found to rate themselves generally higher on the checklist than the coders rated them on the basis of the interview data. Over 40 percent of the mothers who scored "very low (1–3)," "low (4–6)," and "high (7–9)" on the interview, moved into the next highest category when scored by the checklist method.

Having conducted all the interviews on a face-to-face basis, the author felt that the data obtained by the interview were somewhat more valid than data obtained by the checklist.

Use in Research: Bloch (1970) developed and used this instrument along with three others described elsewhere in this compilation (Attitudes Toward Content and Timing of Sex Education, Attitudes Toward Sex Education in Schools, and Sex Knowledge Test) for her doctoral research referenced below.

Comments: These instruments appear to have potential for providing information on the variable they were designed to measure. It would be helpful to have information on the test-retest characteristics of the instruments. It would also be helpful to have information on the inter-item and item variable characteristics. It was pointed out by the author that the items have Guttman-type characteristics. This may, indeed, be the case, but it would be helpful to have information that could confirm this, and/or that would lend itself to the development of alternative procedures for scoring responses.

It would be helpful to have more information on the relationship between the scores and/or item responses on the checklist as compared with those derived from the structured interview procedures. The author indicated that scores on the checklist were higher than those derived from the interview schedule. This may be due to a number of possibilities, including the limited nature of the response alternatives used in the checklist as well as to differences in the questions asked within the father and birth control sets of questions. The author assumed that the information provided by the checklist was less valid than that obtained from a structured interview. It would be helpful to have more information regarding the relationship between the variable measured by the checklist and other variables before such a conclusion is reached.

Finally, it would be helpful to have additional information based on a much larger sample of respondents selected from a variety of communities.

Any potential user should examine the instruments carefully to be certain that the terminology used is appropriate for his(her) study population.

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Bloch, Doris

PARENTAL SEX EDUCATION PRACTICES CHECKLIST

Just to get a quick idea of what you and .... have talked about so far, I wonder whether you would check off on this list those things you have already talked about, and those things you haven't talked about yet.

Check "talked about already" if you have talked about it quite a bit, or just "somewhat."

Check "not yet talked about" if you have not talked about it at all.

(IF INDICATED)
Would you prefer if I read them to you?

PARENTAL SEX EDUCATION PRACTICES CHECKLIST

		Talked About	
		Already	Not Yet
M2.	How to put the pad and the belt on when you have your period.		
M2.	How to keep yourself clean during your period.		
M3.	How often women have a period, and how long it lasts.		
M3.	That girls can get pregnant when they start menstruating.		
M4.	What happens inside the body when a woman has a period.		
M5.	That the blood feeds the baby if the woman gets pregnant, instead of flowing out.		
F2.	That you need a man and a woman to have a baby.		
F3.	That you need a sperm (seed) from the father and an egg from the mother to have a baby.		
F4.	That during intercourse the man puts his penis in the vagina of the woman.		
F5.	How people feel before and during intercourse.		
B2.	That people can do something to keep from getting pregnant.		

PARENTAL SEX EDUCATION PRACTICES CHECKLIST

	Talked About	
	Already	Not Yet
B3. That women can take pills to keep from getting pregnant.		
B4. That there are other things people can use besides the pill to keep from getting pregnant.		
B5. How some of these other birth control methods work.		

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Bloch, Doris

PARENTAL SEX EDUCATION PRACTICES INTERVIEW

MENSTRUATION

I wonder how much mothers and daughters talk about the facts of life together:

whether girls ask questions about these things;
what kinds of questions they ask, and
what mothers do when a question is asked.

Let's start with menstruation.
Would you tell me, in as much detail as you can remember, about your own experiences with ....

Let me ask you a few questions to get you started:

Did you ever talk to her in any way about menstruation?
Do you remember her ever asking any questions about it?
What did you do when she asked?

MENSTRUATION - PROBES

a. KOTEX
At some time or another over the years, she has probably seen your Kotex, maybe when you bought it, or at home. Do you remember her ever asking anything about that?

b. EQUIPMENT
Have you ever talked to her about how to use the pad and the belt, and how to keep yourself clean, and things like that?

c. CYCLE
Has anything ever come up about how often women have a period, how many days it lasts, and things like that?

d. PHYSIOLOGY
Has anything ever come up about what happens inside a woman's body when she menstruates: where the blood comes from, why the blood comes out, and about the egg?

e. MENSTRUATION-PREGNANCY
Have you ever had a chance to explain to her how menstruation has something to do with pregnancy?

FATHER'S PART

Now, let's get off menstruation, and on to a different topic. Have the two of you ever talked in any way about what makes a baby start growing, about the father's part in having a baby?

FATHER'S PART - PROBES

a. MAN AND WOMAN NEEDED
Has anything ever come up about the fact that you need a father and a mother to have a baby?

b. SPERMS
Have you ever had a chance to talk to her about the sperm or the seed from the father?

c. SPERMS - PHYSIOLOGY
Have you ever mentioned to her where the sperms come from and how they come out?

d. SIMPLE FACTS
Have you ever said anything to her about how the sperms get from the father to the mother?

e. INTERCOURSE
Have the two of you ever talked about how people have intercourse?

f. INTERCOURSE - FEELINGS
Have you ever talked about what petting and intercourse is like, and how it makes people feel?

g. ILLEGITIMACY
Has anything ever come up about having babies without being married?

BIRTH CONTROL

Does she know anything about birth control?
Has anything ever come up about that?

BIRTH CONTROL - PROBES

a. ACT OF INTERCOURSE
Some children ask whether women have a baby each time they have intercourse. Do you remember whether this has ever come up with her?

b. PREVENTION POSSIBLE
Have you ever mentioned to her that people can do something to keep from getting pregnant?

c. PILL
A lot of the girls nowadays hear or read about the pill. Has she ever said anything about the pill to you, or asked anything about it?

d. CONTRACEPTIVES
Has anything ever come up about other things people use to keep from getting pregnant?

SCORING GUIDE FOR PARENTAL SEX EDUCATION PRACTICES INTERVIEW

SCORING GUIDE - MENSTRUATION

1	a. No communication; no questions; questions asked, but not answered. b. Offers to answer questions, but none asked. c. Moralisms, warnings, admonitions, unexplained do's and don'ts.
2	a. Use of pads and belt; disposal of pads. b. What to do when it starts. c. Menstrual hygiene, cleanliness, exercise, discomfort.
3	a. Menstrual cycle manifestations: frequency, regularity, duration. b. Use of tampons. c. Relation of menstruation to pregnancy: minimal, no detail. "You are a young lady now, you can have a baby."
4	Reason for menstruation: minimal, just touched on. blood is waste; no menstruation during pregnancy; blood is cushion for baby.
5	a. Female physiology and anatomy: elaboration of 4: ovulation, building up of uterine lining, breakdown of lining; purpose of blood is to nourish baby, if pregnancy occurs. b. Relationship of menstruation to pregnancy: more detail.

SCORING GUIDE - FATHER'S ROLE

1	a.	No communication, no questions; questions asked, but not answered.
	b.	Offers to answer questions, but none asked.
	c.	Moralisms, warnings, admonitions, unexplained do's and don'ts.
2	a.	Concept that a male is needed; that a part from a male is needed.
	b.	Concept of unwed motherhood: no detail.
3	a.	Simple male reproductive anatomy: penis, scrotum.
	b.	Sperms: what they are, where they are made.
	c.	Concept that man and woman "get together": unexplained.
	d.	Concept that sperm from man goes up into body of woman: mechanics not explained.
	e.	Elaboration of concept of unwed motherhood.
4	a.	Simple facts of intercourse: penis enters vagina, sperms exit from penis.
	b.	Relation of intercourse to pregnancy.
5	a.	More detail of intercourse: mechanics, erection, foreplay.
	b.	Sexual feelings before, during, after intercourse.
	c.	Sexual feelings in dating: necking, petting.

SCORING GUIDE - BIRTH CONTROL

1	a. No communication, no questions; questions asked, but not answered. b. Offers to answer questions, but none asked. c. Moralisms, warnings, admonitions, non-explained do's and don'ts.
2	a. Concept that not every act of coitus results in pregnancy. b. Concept that people can do something to prevent pregnancy.
3	a. Concept of the pill as a contraceptive: no detail.
4	a. More detail on pill. b. Reference to mother using or not using pill. c. Other methods of birth control mentioned: no detail.
5	a. Other methods of birth control: some detail. b. Reference to birth control (other than pill) used by mother.

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Title: LONELINESS RATING SCALE

Author: Francis, Gloria M.

Variables: This scale is designed to measure two variables: *human secondary loneliness* and *cathectic investment*. Cathectic investment is seen as an intervening variable in the measurement of loneliness and is defined conceptually as the endowment of social and physical objects (people and things) with meaning, import, and energy.

Cathectic investment is operationalized as follows:

1. A person seeking optimal gratification finds himself in a situation which includes a constellation of objects.
2. He compares the objects.
3. He seeks potential gratification in certain of those objects.
4. He ascribes positive significance to them.
5. Situations in which he finds those objects recur.
6. Positive significance increases and it becomes an emotional investment.
7. He can verbalize knowledge of his investments.

Secondary loneliness is operationalized as follows:

1. One has cathectic attachments to persons and things.
2. He is separated from them.
3. As a result, certain needs go relatively unmet.
4. He might experience a vague dysphoria; he is more or less lonely, relative to the amount of cathectic investment in the now separated objects.
5. He can verbalize awareness of his subjective dysphoria.

Description:

Nature and Content: The items used to measure cathectic investment and loneliness are part of a 16-question interview form. Items 1, 2, 3, 5, and 6 are indicators of cathectic investment, while items 8, 9, 10, 11, and 13 are indicators of loneliness. Each of these 10 items is represented by a five-choice response scale. Each of the five response alternatives is specifically defined. The specific response alternatives represent an ordinal scale. Item 2, for example, is "About how much time would you say you spent there?" This item provides response alternatives of: (5) practically all the time, (4) most time except for, (3) hard to say—came and went, (2) away more than there, and (1) very little. This type of scaling has the advantage of minimizing subject response set, as it requires a response to specific alternatives rather than only numbers.

Administration and Scoring: The Loneliness Rating Scale is administered as an interview with only the subject and the interviewer present. It can be administered by any professional health worker, behavioral scientist, or properly prepared student. It is necessary that the subject be able to understand the questions and respond verbally. The only problem connected with the administration of the instrument was that the reflective nature of the questions asked often caused the subject to cry.

Scores are computed for cathectic investment by simply summing the responses for items 1, 2, 3, 5, and 6. The loneliness score is computed as the sum of responses to items 8, 9, 10, 11, and 13. The numerical range for each score is between 5 and 25.

Development:

Rationale: The development of this instrument is related to the following conceptual scheme.

Individuals have endowed certain social and physical objects with meaning and energy. In the course of life they are separated from some, or all, of those objects. At this point relative deprivation or gratification will be experienced to the same intensity with which the now separated objects were invested with meaning and energy. The greater the investment, the greater the deprivation when separated, and the greater the secondary loneliness. Conversely, the less the investment, the greater the gratification, and the less loneliness should be experienced.

The instrument was developed for the purpose of measuring both the amount of cathectic investment and loneliness.

Scores of Items: The items were constructed based on information found in the work of Townsend (1957) and Tunstall (1966), and earlier research by the instrument's author.

Procedure for Development: The items as constructed by the author were included in the questionnaire form along with open-ended items. The instrument was then used in a study of loneliness among hospitalized adults. The instrument was used in a structured interview situation with 133 nonintensive care medical patients.

Reliability and Validity: Test-retest reliability coefficients were computed for both the cathectic investment and the loneliness scales on the basis of the scores of 27 subjects with a 2-week interval between administrations. Coefficients of $r = 1.00$ and $e = 0.98$ were obtained for the cathectic investment and loneliness scales, respectively.

The instrument has content validity based upon the opinion of expert judges. The author stated that the instrument has construct validity based upon the logical definition of loneliness, which corresponds to the construct the instrument was designed to measure. Patients' self-ratings of loneliness correlated significantly ($p < 0.02$) with their scores on the instrument, which is additional validity evidence.

Use in Research: The development and use of the instrument are described in the author's doctoral dissertation (Francis, 1972) and an in-press article "Loneliness: Measuring the Abstract" (Francis, 1976).

Comments: This instrument has potential for measuring the variables it purports to measure. Efforts to establish additional evidence of the reliability and validity and to develop norms for the instrument are underway by the author.

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LONELINESS RATING SCALE

Directions to Interviewer

1. Introduce yourself.
2. State that the purpose of the study is to determine which kind of persons are most affected by separation from loved ones.
3. Indicate that permission from the ______________________ and the __________________ have been obtained.
4. State that all information is confidential and that interviewees are anonymous since names do not appear on forms.
5. Assure the person that he does not have to participate. If he is willing to participate ask him to sign the consent form. The interview takes twenty minutes.

1. First, about where you lived before coming here . . . was it a: (Circle number and enter on right.)

House	Apartment	Room	Institution	Drift
5	4	3	2	1

______ (ci)

2. About how much time would you say you spent there?

Practically all your time	Most time except for	Hard to say; came and went	Away more than there	Very little
5	4	3	2	1

______ (ci)

3. How many people lived with you in your ____________________?

More than three	Three	Two	One	None
5	4	3	2	1

______ (ci)

4. What relations were they to you? (Place number in space.)

Spouse ______
Children ______
Siblings ______
In-laws ______
Friends ______
Grandparents ______
Aunts/Uncles ______
Other ______

*Hospital Adaptation

5. This may be difficult, but think, with how many persons, generally, would you say you were closely attached or emotionally close when you came here?

More than three	Three	Two	One	None
5	4	3	2	1

_____ (ci)

6. This may sound odd, but did you have any special things, other than people, where you lived, that were and are particularly important or meaningful to you?

Many	A few	Hard to say	Just one	No
5	4	3	2	1

_____ (ci)

7. What are the things or objects that were and are particularly important to you?

Certain foods __________

Pets __________

Entertainment (passive) __________ __________

Recreation (active) __________

News/Phone/Mail __________

Job/Work __________

Other __________

8. Now the questions will shift to the hospital. Some people miss their homes when they have to leave them . . . do you miss or feel particularly separated from where you lived since you came to the hospital?

Very much so	Most of the time; not always	Sort of; hard to say	Occasionally	No
5	4	3	2	1

_____ (L)

9. Do you miss or feel separated from any of the persons you said you were close to (mention them)?

Very much so	Most of the time; not always	Sort of; hard to say	Occasionally	No
5	4	3	2	1

_____ (L)

10. Do these persons visit you here?

Never	Rarely	Sporadically	Every other day	Every day
5	4	3	2	1

_____ (L)

11. Do you particularly miss or feel separated from the special things you mentioned (name them)?

Very much so	Most of the time; not always	Sort of; hard to say	Occasionally	No
5	4	3	2	1

_____ (L)

12. Now think about this question and tell me in your own words. Try to describe what it has been like to you or how it feels to you to be separated from the people and things you were and are used to being with?

13. (If R. misses anyone or anything ask) Do you miss the people (name them) and things (name them) worse or less the longer you are here in the hospital?

Much more	More except for . . .	Some more; some less	Less except for . . .	Much less
5	4	3	2	1

____ (L)

14. (If 13 rated 5 or 4 ask) Can you say why you miss them more the longer you are here, i.e., why it gets worse?

14A. (If 13 rated 1 or 2 ask) Can you say why you miss them less the longer you are here, i. e., why it gets better?

15. When will you be discharged?

Gives a date ____

It depends on . . . ____

No idea ____

16. Would you say you experienced "loneliness" while you have been here in the hospital?

Very much so	Yes but it was broken up by ...	Unable to say; ambivalent	A little	No
5	4	3	2	1

Now a few facts about yourself.

17. Are you (circle) M W D S

18. What is your usual occupation? ____________________

Circle: UNS SEMI SK BUS/PROF

19. What was the highest grade of school or college you completed? ________

____

20. Do you have a religious preference?

Circle: P C J Other

21. Now I will show you a card with income groups on it. Consider all sources of family income for the year just past, such as wages, social security, interest, etc., and tell me by number in which group your family belongs. (Check)

(1) Under $ 5,000	_____	(4) $ 15,000 to $ 19,999	_____
(2) $ 5,000 to $ 9,999	_____	(5) $ Over $ 20,000	_____
(3) $ 10,000 to 14,999	_____		

That was the last question. Thank you very much for helping me.

Obtain from hospital chart:

22. Age: ________

23. Sex: M F

24. Racial group: B W

25. Number of occupied beds in patient's room: ____________

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Title: SOCIAL PSYCHOLOGICAL DETERMINANTS OF PATIENTS' PERFORMANCE IN STROKE REHABILITATION

Author: Hyman, Martin D.

Variables: The instrument was developed to assess three categories of social psychological variables: (1) *Self-concept* in terms of feelings of stigma associated with an illness and low self-esteem, (2) *Attitudes toward the premorbid life situation* in terms of dissatisfaction with a patient's social roles and feelings of social isolation, and (3) *Attitudes toward illness* in terms of dependence on hospital staff, belief in supernatural cause of illness, and derivation of secondary gain from illness.

Description:

Nature and Content: The questionnaire of a total of 29 items contained in 8 scales. Eight of the nine are Guttman scales or Guttman quasi-scales, and most require the patient to indicate his agreement or disagreement with each item.

1. *Feelings of Stigma* related to illness are assessed by a 3-item scale. For example, "People often don't feel comfortable being with someone with an illness like mine."

2. *Self-esteem* is measured by a 4-item scale adapted from Rosenberg's measure of self-esteem. A typical item is "On the whole you are satisfied with yourself." (agree or disagree)

3. *Satisfaction with Occupational Role*, measured by three items with varying response alternatives. For instance, "How much do you get a feeling of accomplishment from the work you have been doing? Would you say it gave you a lot of this feeling, a little of this feeling, or none of this feeling?"

4. *Satisfaction with Family Role* consists of five items adapted from the Minnesota Survey of Opinion, requiring the patient to indicate his agreement or disagreement with statements such as "It's hard for me to be happy at home." (agree or disagree)

5. *Feelings of Social Isolation* are assessed by two measures, according to a published paper, but only one part is included in the tool submitted. It is a 4-item Guttman quasi-scale modified from Dean's measure of alienation with items such as "I don't get invited out by my friends as often as I'd like." (agree or disagree)

6. *Dependency* on hospital staff is measured by a number of items, including both a question and two statements. For instance, "Nurses and other staff here sometimes think I'm capable of doing more things for myself than I really can." (agree or disagree)

7. *Belief in supernatural cause of illness* is a 4-item Guttman quasi-scale. The patient is asked to agree or disagree with statements like "We get sick because we were meant to suffer."

8. *Secondary gain* in illness is a 3-item Guttman scale with items such as "When you're sick you don't have to do some of the things you didn't like to do when you were well." (agree or disagree)

Administration and Scoring: The instrument is used as an interview schedule administered to patients shortly after hospital admission. Patients must be able to understand the questions and respond appropriately.

Response to the two items related to Social Isolation which are not Guttman scaled are combined to form an index of social integration and interdependence. All other scales are scored by adding up the number of responses indicative of the trait in question. For instance, *agreement* with the statement, "My home is the most pleasant place in the world," and *disagreement* with the statement "It's hard for me to be happy at home," both add to the patient's score on the Satisfaction with Family Role scale.

Development:

Rationale: It is now widely recognized that social and psychological factors, because of the way in which they shape the patient's motivation, influence the course and outcome of rehabilitation. The literature suggests a number of social psychological variables that may be related to rehabilitation outcomes. For example, if the patient feels stigmatized by his disability, the concomitant social withdrawal may pose an obstacle to the translation of rehabilitation gains into increased functioning and social participation (Hyman, 1972).

Source of Items: The Self-Esteem scale was adapted from Rosenberg's Index of Self-Esteem; the Satisfaction with Family Role scale was adapted from the Minnesota Survey of Opinion; and part of the Feelings of Social Isolation scale consists of modified items from Dean's Measure of Alienation (Hyman, 1972).

Procedure for Development: No details were provided.

Reliability and Validity: Although the scales are claimed to be Guttman scales or quasi-scales, they do not meet the stringent criteria which Guttman has set. The scale reproducibility is marginal, and nothing is stated about item reproducibility. More important, the number of items is far fewer than the 10 which Guttman regards as minimally acceptable. Nothing is stated about the item marginal frequencies which tend to make the coefficient of reproducibility spuriously high. The available evidence only shows that the coefficient is significantly different from zero.

With regard to validity, it was shown that patient's feeling of stigma was significantly related to relatives' judgments, and that feelings of social isolation was significantly related to a measure of objective social isolation as manifested in the patient's living arrangements before hospitalization (Hyman, 1972). There is, however, no quantitative evidence of validity, nor is any information available on reliability.

Use in Research: The instrument was used by Hyman (1972a) in an investigation of patients' self-conceptions, attitudes toward premorbid life situations, and attitudes toward illness on motivation and functional improvement manifested during a program of rehabilitation for stroke. Functional improvement was assessed using the Kenny Self-Care Evaluation Scale, and motivation was measured twice, with a 4-week interval, by a 5-item rating scale completed by the patient's physical therapist. The social psychological variables under consideration demonstrated substantial predictive power both individually and jointly.

Other aspects of the study are discussed in greater detail in two other publications (Hyman, 1971; Hyman, 1972).

The author recommends that the tool be used as a screening instrument that would permit both the early identification of patients likely to do poorly in rehabilitation because of social psychological barriers and the delineation of the precise obstacles at issue in each case.

Comments: Although the instrument was originally designed to measure the determinants of patients' performance in stroke rehabilitation, it may apply to the study of recovery from other types of illness as well. While the scales that constitute the main part of the instrument are said to be Guttman Scales and Guttman quasi-scales, inspection of the scales does not generally lead to that conclusion, and further testing is indicated. Results of an initial study indicate that scale scores are related to independent variables (motivation and performance) in the manner suggested by theory, but quantitative evidence of reliability and validity is needed.

The instrument might be improved by refining the items for more consistency in wording. For example, the items under "Feelings of Stigma" use the pronouns me, mine, and my; the items under the section "Self-Esteem," which follows, uses the pronoun you, yet both groups of items ask the respondent if he(she) agrees or disagrees with each statement.

References:

Hyman, M. D. The stigma of stroke: Its effects on performance during and after rehabilitation. *Geriatrics*, 1971, *26*, 132–141.

______. Social psychological determinants of patients' performance in stroke rehabilitation. *Archives of Physical Medicine and Rehabilitation*, 1972, *53*, 217–226.

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SOCIAL PSYCHOLOGICAL DETERMINANTS OF PATIENT'S PERFORMANCE IN STROKE REHABILITATION

Feelings of Stigma (Agree or Disagree)

1) People often don't feel comfortable being with someone with an illness like mine.

2) Some people probably look down on me because of my illness.

3) Many people would rather not be seen in the company of someone who has an illness like mine.

Self-Esteem (Adopted from Morris Rosenberg, Society and the Adolescent Self Image. Princeton, Princeton University Press, 1965) (Agree or Disagree)

1) On the whole you are satisfied with yourself.

2) You are able to do things as well as most other people.

3) You certainly feel useless at times.

4) You feel that you're a person of worth, at least on an equal place with others.

Satisfaction with Occupational Role

1) How much (do) (did) you get a feeling of accomplishment from the work (you've been doing) (you did)? Would you say it gave you a lot of this feeling, a little of this feeling, none of this feeling?

2) If you had your life to live again, would you want to do the same kind of work you (are doing) (you did)? (Yes or No)

3) Was the amount of money (you) (for women: your spouse) earn(ed) higher, the same or less than what most other (name occupation) get?

Satisfaction with Family Role (Adopted from Minnesota Survey of Opinions in Delbert C. Miller, Handbook of Research Design and Social Measurement, New York: David McKay Company Inc., 1964, pp. 160-172) (Agree or Disagree)

1) It's hard for me to be happy at home.

2) My home is the most pleasant place in the world.

3) It's easy for me to become nervous at home.

4) The joys or pleasures of home life are not as great as some people think they are.

5) I am most satisfied when I am at home.

Loneliness (Adapted from Dwight Dean, "Meaning and Measurement of Alienation," American Sociological Review, Vol. 26 (October 1961), pp. 753-758) (Agree or Disagree)

1) Many people are lonely these days.

2) A person can always find friends if he himself is friendly.

3) Often I feel all alone in the world.

4) I don't get invited out by friends as often as I'd like.

Dependency

1) Do staff members here do all the things to take care of you that you'd like them to do? (Yes or no)? If no: what don't they do that you'd like them to do? (Answers alluding to insufficient attention and comfort were categorized as indicative of dependency. All other answers, and those answering "yes" to the original question, are scored as not dependent on this item.)

2) Nurses and other staff here sometimes think I'm capable of doing more things for myself than I really can (Agree or Disagree)

3) (Adapted from G. Kassebaum and B. Baumann, "Dimensions of the Sick Role in Chronic Illness," Journal of Health and Human Behavior, 6 (Spring, 1965), pp. 16-27. In general people expect too much from a person who is sick (Agree or Disagree).

Belief in Supernatural Cause of Illness (Agree or Disagree)

1) We are sick because we were meant to suffer.
2) Man deserves the illness he gets because he was born evil.
3) Illness is what God sends us so we should accept it.
4) Sometimes illness is God's punishment for doing wrong.

Secondary Gain (Agree or Disagree)

1) When you're sick you don't have to do some of the things you don't like to do when you were well.

2) When you're sick you have time to get away from the commotion of life.

3) Often the only real rest a person gets is when he is sick.

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Title: PSYCHOSOCIAL PROBLEMS INVENTORY

Author: Jacox, Ada, and Stewart, Mary

Variables: The variables measured by this instrument are psychosocial problems that are associated with pain and illness. A psychosocial problem is conceptualized as "something that is a source of distress to a person."

Description:

Nature and Content: This instrument is a 24-item inventory. Six types of psychosocial problems are measured. They are described as problems related to: feelings of loneliness, fear of pain, depression, dependency, family, and vocation (Jacox and Stewart, 1973). Each of the six problem types is operationalized by a subset of four items. The items are in the form of statements about feelings such as "Would like more contact with others." The subject responds to each statement by choosing one of three response alternatives: yes, occasionally, and no. The subject is asked to choose "yes" if the statement describes how his(her) pain or illness usually makes him(her) feel, "no" if it does not, and "occasionally" if this feeling occurs part of the time.

Administration and Scoring: The instrument is self-administered. For each item, the subject simply circles the best response alternative.

For each of the 24 items, a "Yes" is scored a value of 2, "Occasionally" a value of 1, and "No" a value of 0. The sum of all response scores provides a total score ranging from 0 to 48. Subscores for each problem type can be computed using the same method.

Development:

Rationale: The underlying rationale for the development of this instrument lies in the concept of pain and illness being viewed as a bio-psychosocial phenomenon. Pain and illness are considered as being associated with a variety of psychosocial problems, some of which are measured by this instrument.

Source of Items: The authors do not explicitly identify the source of the items. However, they did mention that this inventory was patterned after one developed by Wright and Remmers (1960).

Procedure for Development: No specific developmental procedure was reported by the authors.

Reliability and Validity: A split-half reliability of 0.84 was computed for the Problems Inventory. The sample consisted of 102 hospital patients (31 short-term pain patients, 31 long-term pain patients, and 40 progressive pain patients).

Concurrent validity was tested by correlating the inventory scores with scores from other indices. The inventory correlated positively with the Neuroticism Scale of the Eysenck Personality Inventory ($r = 0.43$, $p < 0.01$, $n = 97$). It is also correlated negatively with a Health Self-Concept Scale ($r = 0.41$, $p < 0.01$, $n = 97$).

The authors reported that face validity was considered good as judged by a panel of three instructors in psychiatric and medical-surgical nursing.

Use in Research: The Problems Inventory was developed and used in the study entitled "Psychosocial Contingencies of the Pain Experience" (Jacox and Stewart, 1973). Other instruments used in the study included the Eysenck Personality Inventory, the Modified Cornell Medical Index-J Index, and the Modified Melzack Pain Description. The study was aimed at exploring the psychosocial correlates of pain and illness.

Comments: The Problems Inventory appears to be easy to administer and score. It might well be a useful tool for the assessment of a patient's psychosocial problems as those problems relate to the pain and illness experience.

While reliability and validity have been tested to some degree by the authors, further explorations into these areas should be made.

References:

Jacox, Ada, and Stewart, Mary. *Psychosocial contingencies of the pain experience.* Iowa City, Iowa: University of Iowa, 1973.

Wright, G. N., and Remmers, H. H. *Manual for the handicap's problem inventory.* New York: Purdue Research Foundation, 1960.

Source of Information:

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Instrument Copyright:

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Jacox, Ada, and Stewart, Mary

PSYCHOSOCIAL PROBLEMS INVENTORY

WE KNOW THAT ILLNESS AND PAIN MAKE NEW PROBLEMS AND ADD TO OLD PROBLEMS. HERE IS A LIST OF DIFFICULTIES REPORTED BY PEOPLE AS BEING CONNECTED WITH THEIR ILLNESS. SOME OF THESE PROBLEMS ARE STATED BY ALMOST EVERYONE AS PART OF BEING ILL AND IN PAIN; OTHER PROBLEMS ARE EXPERIENCED BY ONLY A FEW. BY LEARNING MORE ABOUT HOW PEOPLE'S ILLNESS AND PAIN BOTHER THEM, HOSPITAL PERSONNEL WILL BE BETTER ABLE TO HELP.

INSTRUCTIONS: FOR EACH OF THE FOLLOWING STATEMENTS, PLEASE CIRCLE "YES" IF IT DESCRIBES HOW YOUR PAIN AND ILLNESS USUALLY MAKE YOU FEEL AND "NO" IF IT DOES NOT. IF YOUR PAIN AND ILLNESS MAKE YOU FEEL THIS WAY OCCASIONALLY, CIRCLE "OCCAS'Y".

1. WOULD LIKE MORE CONTACT WITH OTHERS. YES OCCAS'Y NO
2. WORRY ABOUT DUTIES AND BURDENS AT HOME. YES OCCAS'Y NO
3. FEEL DISCOURAGED MORE EASILY. YES OCCAS'Y NO
4. HAVE TO LEAN ON OTHERS TOO MUCH. YES OCCAS'Y NO
5. FEEL INSECURE ABOUT EARNING A GOOD INCOME. YES OCCAS'Y NO
6. FEAR MAY NOT BE ABLE TO GET RELIEF FROM PAIN. YES OCCAS'Y NO
7. FEEL LONESOME. YES OCCAS'Y NO
8. FEEL UNSURE ABOUT FUTURE HOME LIFE. YES OCCAS'Y NO
9. SEEM TO HAVE GIVEN UP. YES OCCAS'Y NO
10. FEEL BADLY WHEN OTHERS HAVE TO DO SO MUCH FOR ME. YES OCCAS'Y NO
11. LOSE CONFIDENCE IN WORK ABILITY. YES OCCAS'Y NO
12. FEAR HAVING MORE PAIN LATER. YES OCCAS'Y NO
13. FEEL ISOLATED FROM OTHERS. YES OCCAS'Y NO
14. FEEL AM NOT ABLE TO DO ENOUGH FOR FAMILY. YES OCCAS'Y NO
15. FEEL THERE IS NO HOPE. YES OCCAS'Y NO
16. WOULD LIKE TO BE MORE INDEPENDENT. YES OCCAS'Y NO
17. FEAR NOT BEING ABLE TO CONTINUE WITH USUAL JOB. YES OCCAS'Y NO
18. FEAR PAIN MAY AFFECT MIND. YES OCCAS'Y NO

19.	SPEND TOO MUCH TIME ALONE.	YES	OCCAS'Y	NO
20.	WORRY ABOUT HOW WELL FAMILY IS GETTING ALONG.	YES	OCCAS'Y	NO
21.	FIND IT HARDER TO FACE LIFE.	YES	OCCAS'Y	NO
22.	FEEL BADLY ABOUT ASKING FOR HELP WHEN NEEDED.	YES	OCCAS'Y	NO
23.	CANNOT BE SURE ABOUT FUTURE WORK CHANCES.	YES	OCCAS'Y	NO
24.	FEAR MAY NOT HAVE ENOUGH COURAGE TO STAND PAIN.	YES	OCCAS'Y	NO
		2	1	0

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Title: SEMANTIC DIFFERENTIAL FOR HEALTH (SDH)

Author: Jenkins, C. David

Variable: The instrument measures a subject's beliefs and feelings about disease(s). Beliefs and feelings about diseases are operationalized by the respondent's perceptions of:

Rate of attack of the disease
Association of the disease with certain ages
Amount of pain associated with the disease
Degree of recovery possible
Respondent's chance of contracting the disease
Chance of dying from the disease
Social acceptability of the disease—clean vs. dirty
Preventability of the disease
Speed of progression of the disease
Severity of the disease
Man's understanding and mastery of the disease
Frequency of the respondent's thoughts about the disease
Kind of people who contact the disease
Value of avoidance
Frequency of public discussion about the disease
Social acceptability of the disease—confidence vs. disgrace

Description:

Nature and Content: This is an application of the semantic differential technique developed by Snider and Osgood (1969) to the study of beliefs about diseases. The interview-administered instrument consists of a set of 16 scales; each scale represents a continuum between descriptive words or phrases which elicit perceptions of the various dimensions of a disease identified above under Variable.

Administration and Scoring: This instrument is to be administered by an interviewer familiar with the instrument and its administration. After establishing rapport with the respondent and eliciting demographic data, the interviewer introduces the SDH by a simple example and then supervises the respondent in marking some practice scales to be certain the respondent comprehends the task. Each scale is then read to the respondent and his(her) response elicited in the following manner: "This line says: Many people get it. Some people get it. A few people get it. Almost nobody gets it. Where on this line would you put (interviewer uses name of disease under study)?" The respondent marks his(her) reply by placing a check at whatever position on the continuum he(she) feels best represents his(her) view.

The author converted the responses to each scale to a cumulative frequency distribution for each disease. Using the Kolmogorov-Smirnoff two-sample test for frequency distributions, he then tested the significance of the differences between distributions, i.e., the likelihood that the observed distribution of perceptions might be random samples of some larger hypothetical set of perceptions about the same or equivalent conditions (Jenkins, 1966b).

Development:

Rationale: The content of the instrument was derived from theories of the dynamics of health-related behavior (Jenkins, 1966b).

Source of Items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: No information was provided.

Reliability and Validity: The reliability and validity of the SDH scales are discussed extensively by Jenkins (1964). In brief, the test-retest reliability of the individual items depends both on the item and the disease to which it is being applied. In Jenkin's (1964) study, the SDH scales applying to poliomyelitis and mental illness were administered twice to one sample, first in January and again in May 1962. The raw scores of the January responses were converted to t-scores; these were correlated person-to-person with the May responses which were also converted to t-scores. The reliability coefficients ranged from 0.23 to 0.56.

Statisticians argue, however, that for this type of test, a more appropriate approach to reliability is to use the square root of the communality estimate in a factor analysis as the estimated lower limit of reliability. Using this approach, the item reliability coefficients for the mental illness and poliomyelitis scales scores ranged from 0.11 to 0.69 with 19 of the 32 being in the 0.50s and 0.60s.

> To demonstrate the validity of an instrument purporting to measure beliefs and feelings about a disease is a perplexing problem . . . . Direct proofs of validity cannot be offered. The most conclusive answer to the question of validity will be whether present and future inferences from the SDH data can lead to new insights into the nature of human beliefs and feelings and whether this, in turn, can be translated into more effective health planning (Jenkins, 1964).

Use in Research: This instrument itself, and adaptations of it, have been widely used in health-related research. The author used the instrument to investigate the beliefs of 436 residents, aged 20 to 39 years of age, of a large urban county of Florida concerning tuberculosis, poliomyelitis, cancer, and mental illness (Jenkins, 1966b).

Antonovsky (1972) used an adaptation of the SDH to study the images of cancer, heart disease, mental illness, and cholera held by the urban Jewish population of Israel.

Comments: This instrument offers a useful, alternative approach to the usual survey-type information-gathering techniques. As the author pointed out:

> The semantic differential and the SDH do not assume that the verbal labels have the same meaning or implications for all respondents. The SDH, like most semantic differential research, does not assign an a priori definition to words but rather defines them a posteriori in terms of the way persons respond to them (Jenkins, 1966b).

Anyone considering using this instrument should consult the author's references listed below, as well as Osgood et al., (1957) and Snider and Osgood (1969).

References:

Antonovsky, Aaron. The image of four diseases held by the urban Jewish population of Israel. *Journal of Chronic Diseases*, 1972, *25*, 375–384.

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Snider, James G., and Osgood, Charles E. *Semantic differential techniques.* Chicago: Aldine Publishing Company, 1969.

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Instrument Copyright: None.

Jenkins, C. David

SEMANTIC DIFFERENTIAL FOR HEALTH (SDH)

NAME: ______________________ DATE: ____________

SUBJECT NUMBER: ______________________ INTERVIEW: PRE _____ POST _____

INTERVIEWER: ______________________

A. MANY PEOPLE GET IT | SOME PEOPLE GET IT | A FEW PEOPLE GET IT | ALMOST NOBODY GETS IT

B. THIS IS USUALLY A DISEASE OF

BABIES | CHILDREN | TEENAGERS | YOUNG ADULTS | MIDDLE AGE | VERY OLD PEOPLE

C IS EXTREMELY PAINFUL | CAUSES MUCH PAIN | CAUSES SOME PAIN | CAUSES LITTLE PAIN BUT IS UNCOMFORTABLE | CAUSES VERY LITTLE DISCOMFORT

D. PEOPLE RECOVER FULLY | PEOPLE RECOVER BUT ARE WEAKER | PEOPLE HAVE PERMANENT MINOR BODY DAMAGE | PEOPLE HAVE OBVIOUS PERMANENT DISABILITY

E. USUALLY CAUSES DEATH | OFTEN CAUSES DEATH | SOMETIMES CAUSES DEATH | RARELY CAUSES DEATH

F. CLEAN — SORT OF CLEAN — SORT OF DIRTY — DIRTY

G. NOTHING CAN PREVENT IT — HARD TO PREVENT — CAN BE PREVENTED WITH A LITTLE EFFORT — EASILY PREVENTED

H. A FAST-MOVING DISEASE — A SLOW-MOVING DISEASE

I. A "POWERFUL" DISEASE — A "MILD" DISEASE

J. A MYSTERY — SOMETHING IS KNOWN ABOUT IT — WELL UNDERSTOOD

K. I THINK ABOUT IT OFTEN — I THINK ABOUT IT SOMETIMES — I THINK ABOUT IT OCCASIONALLY — I NEVER THINK ABOUT IT

L. ATTACKS MOSTLY GOOD PEOPLE — ATTACKS MOSTLY BAD PEOPLE

M. TO GET RID OF IT, I'D GIVE:

A DAY'S PAY	A WEEK'S PAY	A MONTH'S PAY	A YEAR'S PAY

N.	OFTEN TALKED ABOUT	SOMETIMES TALKED ABOUT	OCCASIONALLY TALKED ABOUT	ALMOST NEVER TALKED ABOUT

O.	PROUD	ACCEPTABLE	EMBARRASSED	DISGRACED

Title: PATIENT'S PERCEPTION SCALE

Author: Palmer, Irene S.

Variable: The Patient's Perception Scale measures an adult patient's perceptions of impending general surgery.

Description:

Nature and Content: This self-report rating scale contains 46 statements. The items are grouped into 13 categories. The categories and the number of items in each are as follows: (1) confidence in the ability of the family to maintain itself—4 items, (2) faith in God—3 items, (3) skill and competence of physician, hospital, and staff—7 items, (4) body integrity—3 items, (5) acceptance of the need for surgery—4 items, (6) financial security—1 item, (7) understanding, acceptance, and support of others—4 items, (8) dependency-independency relationships—7 items, (9) postoperative living patterns—3 items, (10) expectations about surgery—2 items, (11) self-awareness—1 item, (12) anesthesia—2 items, and (13) painful procedures—5 items.

Responses are on a Likert-type scale with choices of: strongly agree, agree, undecided, disagree, and strongly disagree.

Administration and Scoring: No special arrangements are necessary for administration of the scale other than it be planned for a time when there are minimal interruptions for the patient. Directions precede the first item on the form as do explanations of the answer choices. Respondents are urged to check all statements. It takes approximately 15 minutes to complete the scale, though no time limits are imposed.

Scores are assigned to answers as follows: strongly agree = 5 points, agree = 4 points, undecided = 3 points, disagree = 2 points, strongly disagree = 1 point. Scores are summed to provide a total score for each respondent. The range of possible scores is 46 to 230 with a score of 230 indicating strongly favorable perceptions toward impending surgery and a score of 46 to 91 indicating strongly unfavorable perceptions toward the surgery. Between those extremes, scores ranging between 184 and 229 are interpreted as indicative of "favorable perceptions toward surgery," those between 138 and 183 as "undecided," and those between 92 and 137 as "unfavorable perceptions toward surgery."

Development:

Rationale: The instrument was not based on any specific theory.

Source of Items: To assure their representativeness, items for possible incorporation were solicited from many available sources. These included: (1) personal observation and experience of subject-matter experts, (2) appropriate literature, (3) peers who could provide relevant content input, (4) students in undergraduate and graduate classes at a local university, (5) nursing students in a diploma school of nursing, (6) nursing personnel in hospitals, and (7) the general public.

Procedure for Development: From the sources identified above, 3,000 suggestions for items were obtained and categorized. Four broad general categories of items were identified: psychological, sociological, biophysiological, and transcendental. Statements in these broad general categories were reviewed, the categories were refined to adhere more closely to the basic ideas in the statements, and the 13 categories identified above under Nature and Content were developed. Simple, clear, concise statements which expressed the basic ideas of the suggested items were prepared. These statements were edited to assure a positive tone in order to avoid generating stress and to refine them so that none contained more than one thought. Each item was also stated in such a way that it could be endorsed or rejected by the respondent in accordance with the respondent's agreement or disagreement with the concept.

Reliability and Validity: A 71-item version of the scale was administered to 50 hospitalized adult patients who were scheduled for general surgery.

Using the Kuder-Richardson split-half method, a reliability coefficient of +0.884 was obtained. Using the Spearman-Brown prophecy formula, a reliability coefficient of +0.939 was obtained.

To establish content validity, the scale was submitted to a panel of three judges who held earned doctorates and were considered experts in their respective fields—medical-surgical nursing, psychiatric nursing, and nursing research. Only those items on which there was 100-percent agreement of judges were retained.

Following administration of the 71-item scale to 50 patients, item-test homogeneity values were calculated using a formula for quintiserial correlations. Forty-six of the original 71 items had t values which equaled or exceeded the 0.001 level of significance. These statements were selected for inclusion in the instrument.

Use in Research: Palmer (1963) developed and used the instrument in her study referenced below. Silva (1976) adapted the instrument for her study, "The Effect of Orientation Information on Spouses' Anxiety and Attitude Toward Hospitalization and Major General Surgery."

Comments: The scale is constructed in simple, meaningful language and is easy and simple to administer. The category to which each item belongs is indicated on the scale. The systematic, methodologically sound steps by which it was developed are impressive and all too rare. However, since all the items are stated in a positive manner, there is some hazard of response set on the part of the respondent. Another problem is that there are very few items in many of the categories. For example, categories VI, XI, and XII contain only one item each.

As should be done, Silva (1976) established the validity and reliability of the adapted instrument for her setting and sample before proceeding with her study.

References:

Palmer, Irene S. *Perceptions of patients to imminent general surgery: A comparative analysis of the expressed perceptions of patients between the ages of twenty-one and sixty years of age to cholecystectomy, gastrectomy, and herniorrhaphy.* Unpublished doctoral dissertation, New York University, 1963.

______. The development of a measuring device: Measuring patients' perceptions toward impending surgery. *Nursing Research*, 1965, *14* (2), 100–105.*

Silva, Mary E. *The effect of orientation information on spouses' anxiety and attitude toward hospitalization and major general surgery.* Unpublished doctoral dissertation, University of Maryland, 1976.

Source of Information:

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Instrument Copyright: Irene S. Palmer, R.N., Ph.D.

Palmer, Irene S.

PATIENT'S PERCEPTION SCALE

Directions:

The following pages contain some statements indicating how patients feel about being operated upon. There are no right or wrong answers to these statements. Let your own personal feelings determine your answers. Please answer every statement. Please check whether you strongly agree, agree, are undediced, disagree, or strongly disagree with each statement.

Checking a statement strongly agree means that you definitely and emphatically agree with the statement. You are really sure of your agreement with it.

If you definitely disagree and have no doubt about your disagreement with the statement, check strongly disagree.

If you are not really sure about how you feel about a statement, check undecided.

If you agree with the statement generally, but are not completely emphatic and very sure about it, check agree.

If you disagree with the statement, but are not really emphatic in your disagreement, check disagree.

EXAMPLE:

Surgical operations have improved so much in the past several years.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

Checking this statement strongly agree means that YOU are very sure that surgical operations have improved a great deal in the past several years. If you definitely and emphatically believe that surgical operations had not improved much in the past several years, you would have checked strongly disagree.

- -

IX 1. Soon I am going to be able to do all the things I used to do.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

I. 2. The people who are closest to me in my family can take this in their stride.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 3. I can be up and doing things for myself in a few days.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

V 4. Surgery is a quick way to get well.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 5. Surgery is much safer today than it was in my parents' time.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XIII 6. The staff help make people comfortable when they have pain.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

IV 7. The thought of having an incision does not upset me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

I 8. My immediate family knows how to manage while I am in the hospital.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 9. Hospitals are the best place to be when you are sick.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XII 10. With God's help, this operation is going to restore my good health.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

X 11. I know what is going to happen to me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VI 12. Money is of little importance at a time like this.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XIII 13. The pain after the operation is not going to amount to much.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

I 14. My immediate family are able to take care of themselves while I am in the hospital.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 15. Even though I am being operated upon, there are some things I am able to do for myself.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

II 16. If you have lots of faith in God, being operated on need not worry you.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 17. Medical science takes the chance out of an operation today.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

V 18. Surgery is necessary to my future health and well-being.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 19. I am doing everything the way the doctors and nurses want.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

V 20. Now is the best possible time for this surgery.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VII 21. The people closest to me understand how I feel about having this operation.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XII 22. What I might way coming out of the anesthesia does not concern me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 23. I am receiving the best care possible.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

V 24. This operation is going to remove my source of discomfort.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 25. It is a relief to me that the entire situation is out of my hands.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VII 26. The people who are taking care of me are a great source of strength to me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

IV 27. Incisions are not very noticeable these days.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 28. At times like this I am glad to depend on other people.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XI 29. This experience is like an adventure to me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 30. I have confidence in the skill of the hospital staff.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VII 31. The people who are caring for me give me great courage.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 32. There is no need to worry about being operated upon.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XIII 33. Pain can be overcome in a situation like this.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XIII 34. Modern drugs make people comfortable.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

IX 35. Soon I can take up where I left off.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

X 36. Most of my questions about the operation have been answered.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 37. I am being as little trouble as possible for the people who are taking care of me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

IV 38. A scar on the abdomen does not matter.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

I 39. This operation creates no problem for the people closest to me.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

II 40. With faith in God, everything turns out well.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

XIII 41. I can take what goes on before and after the operation.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

III 42. We get wonderful care in our hospitals today.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VIII 43. It is a relief that I have no more decisions to make.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

VII 44. The people who are taking care of me know how I feel about having this operation.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

II 45. With prayers, all turns out well.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

IX 46. I can lead my usual life after I am over this operation.
Strongly agree___, Agree___, Undecided___, Disagree___, Strongly disagree___.

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Title: HEALTH-ILLNESS (POWERLESSNESS) QUESTIONNAIRE

Author: Roy, Callista

Variable: A patient's perception of powerlessness in illness is the variable. Powerlessness is defined as the expectancy or probability held by the individual that his(her) own behavior cannot determine the occurrence of the outcomes or reinforcements he(she) seeks (Seeman and Evans, 1962).

Description:

Nature and Content: This is a self-administered, eight-item, forced-choice questionnaire. The items elicit a patient's perception of his(her) control over illness, physicians, nurses, and hospitals. Responses are selected from a four-choice Likert-type scale: I strongly agree, I agree, I disagree, and I strongly disagree.

Administration and Scoring: No special provisions are necessary for administration, and directions precede the first item.

The instrument is scored by assigning weights of 0, 1, 2, and 3 to responses. A patient's score is the sum of the individual responses and may range from 0 to 24; the higher the total score, the higher the patient's perception of powerlessness.

Development:

Rationale: The instrument is based upon Seeman's concept of powerlessness (Seeman and Evans, 1962).

Source of Items: The items were based upon a review of the literature, other available research instruments, and the author's professional experience.

Procedure for Development: The author began with Seeman and Evans's (1962) Powerlessness Scale, Grubb's (1968) Powerlessness Among Mothers of Chronically-Ill Children Scale, and Boire's (1976) Powerlessness Scale. She revised some items from these scales and added others to develop a 12-item instrument. Items were selected that the author felt would express a high or low expectancy on the part of the patient that his(her) own input would make a difference in relation to control emanating from other sources. Following a pretest, the six most discriminating items were retained and two items added which resulted in the present instrument.

Reliability and Validity: The original 12-item instrument was administered in a pretest to 46 adult medical-surgical patients. Using the Spearman-Brown split-half reliability formula, a reliability coefficient of 0.47 was obtained. Reliability of the revised instrument has not been determined.

Content validity was established by the steps followed in the development of the instrument.

Use in Research: This instrument was developed by the author and is being used in conjunction with a Hospitalized Patient Decision-Making instrument, Zuckerman's Affect Adjective Checklist, a distress rating scale, and other research instruments to collect data for her dissertation.

Comments: The instrument appears to have potential to measure what it purports to measure. A thorough assessment of the instrument will have to await the author's conclusion of her study.

Data elicited by this instrument and the author's Hospitalized Patient Decision-Making instrument may show that these two instruments measure variables more similar than dissimilar. Conceptually, the variable of this instrument is very similar to the concept of internal-external locus of control.

References:

Boire, Marie I. *A study of the relationship between trait—powerlessness and situational powerlessness in the hospitalized patient.* Unpublished master's thesis, University of California, Los Angeles, 1976.

Grubbs, Judy E. *Powerlessness among mothers of chronically-ill children.* Unpublished master's thesis, University of California, Los Angeles, 1968.

Roy, Sr. Callista. *Decision-making by the physically ill and adaptation to illness.* Dissertation proposal, University of California, Los Angeles, 1976.

Seeman, Melvin, and Evans, John. Alienation and learning in a hospital setting. *American Sociological Review*, 1962, *27*, 772–283.

Source of Information:

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Instrument Copyright: None.

Roy, Callista

HEALTH-ILLNESS (POWERLESSNESS) QUESTIONNAIRE

Below are some comments about health, illness and the hospital I am interested in knowing how you feel about these statements. There are no right or wrong answers. Please check the response that most nearly agrees with how you feel. Check only one answer in each set.

For example: The sun will rise tomorrow.

__X__ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

1. Getting well in the hospital is a matter of the efforts of all of us; luck has little or nothing to do with it.

______ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

2. It doesn't seem to matter what I say to the doctors and nurses, they go about their business in their own way.

______ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

3. I don't feel there is anything I can do to better my condition.

______ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

4. In the hospital I can be pretty sure that the nurses will listen to me instead of acting just out of routine.

______ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

5. Getting well depends a lot on what I do.

______ I strongly agree
______ I agree
______ I disagree
______ I strongly disagree

6. Getting released from the hospital depends on how lucky you are.

_______ I strongly agree
_______ I agree
_______ I disagree
_______ I strongly disagree

7. I really don't expect to have much control over what happens to me in the hospital.

_______ I strongly agree
_______ I agree
_______ I disagree
_______ I strongly disagree

8. I now feel that I can do a great deal to keep myself well in the future.

_______ I strongly agree
_______ I agree
_______ I disagree
_______ I strongly disagree

Title: HOSPITALIZED PATIENT DECISIONMAKING

Author: Roy, Callista

Variables: A patient's perceptions of the decisions he(she) makes while in a hospital is one variable assessed; the second variable is the decisions the patient would prefer to make in the hospital.

Description:

Nature and Content: This is a self-administered, forced-choice, 15-item instrument. Each item is made up of two statements, and the respondent checks each statement in the space provided under a column headed "As it is" or "As I prefer."

Administration and Scoring: The instrument is self-administered; the author has noted that older patients and some patients of lower socioeconomic background need help in interpreting the directions.

The instrument is scored by giving a score of 1 point for each time the choice involved the patient's making a decision or receiving information. A score of 0 is given for marking the other alternative, hence, high scores equal perceptions of a high degree of decisionmaking power. The preference items are scored similarly. Low scores and high scores are determined by breaking at the median score (Roy, 1976).

Development:

Rationale: The instrument was based upon Glaser and Straus's (1967) grounded theory approach to the study of behavior.

Source of Items: The items were based upon a review of the literature, the professional experience of the author, and controlled clinical observations by the author.

Procedure for Development: Based upon her review of the literature, her professional experience, and the controlled clinical observations, the author developed 25 forced-choice items which related to specific decisions patients could make in relation to their daily care, the hospital environment, their treatment, and a general category of information about their condition. The instrument was pretested with 45 adult medical-surgical hospitalized patients. Following the pretest, the format was simplified and the 15 most discriminating items were selected for inclusion in the revised form.

Reliability and Validity: Using the Spearman-Brown split-half reliability formula, a reliability coefficient of 0.84 was obtained.

The instrument has face validity. Additional validity is evidenced by results of a pretest in two hospitals. In the hospital designated as one in which the patients had a high degree of decisionmaking, 65 percent of the patients' scores placed them in the high decisionmaking category (n = 23). In the hospital designated as one in which the patients had a low degree of decisionmaking, 45 percent of the patients' scores placed them in the high decisionmaking category (n = 13).

Use in Research: The instrument was developed by the author, and is being used along with a Health-Illness Questionnaire Scale, Zuckerman's Affect Adjective Checklist, a distress rating scale, and other research instruments to collect data for her dissertation (Roy, 1976).

Comments: The instrument appears to have potential for determining patients' perceptions of their role in decisionmaking in a health care setting. A thorough assessment of the instrument will have to await the author's conclusion of her study.

References:

Glaser, Barney, and Straus, Anselm. *The discovery of grounded theory.* Chicago: Aldine Publishing Co., 1967.

Roy, Sr. Callista. *Decision-making by the physically ill and adaptation to illness.* Dissertation proposal, University of California at Los Angeles, 1976.

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Instrument Copyright: None.

Roy, Callista

HOSPITALIZED PATIENT DECISION-MAKING

In this part of the study I have some statements about decisions that are made in the hospital. I am interested in how you see these situations in this hospital and in how you would prefer things to be. There are no right or wrong answers, only opinions about these things. Each of the items below is made up of a pair of statements. You will be marking each pair two times each. The first time choose the one statement from the pair (and only one) which is closest to what you believe to be the case. Mark this choice with an X under "As it is." Next select the one of the pair you would want to be true, that is, how you prefer the stituation to be. Mark this choice with an X under "As I prefer."

For example:

		As it is	As I prefer
1.	I am sick now.	X	_____
	I am well now.	_____	X
2.	I am going to be here a while longer.	_____	_____
	I am going home soon.	X	X

		As it is	As I prefer
1.	I have found in the hospital that I often can decide what time to get up.	_____	_____
	I usually have no freedom about the time to get up in the morning.	_____	_____
2.	My recreational activity is under the control of the staff and the routine here.	_____	_____
	I plan my own recreational activity, such as reading or TV based on what I feel able to do.	_____	_____
3.	My level of activity is regulated by the staff without discussion with me.	_____	_____
	My input is important in deciding how much activity I can have.	_____	_____
4.	If I needed surgery, I would make the decision about whether and when to have it.	_____	_____
	My doctor would make any decision about surgery.	_____	_____

As it is As I prefer

5. Most of the time the staff in the hospital explains everything that is done to me. ____ ____

Most of the time I don't know what to expect next in the hospital. ____ ____

6. I've observed that doctors and nurses don't realize that patients need a lot of information about their condition. ____ ____

Most of the time doctors and nurses realize how much information patients need to know about their condition. ____ ____

7. In the hospital I have a say in planning my diet based on my own health needs and my own habits. ____ ____

My individual needs and concerns about my diet cannot be taken into account around here. ____ ____

8. There are some medications that I can decide when I should have them. ____ ____

All decisions about medications are made by the doctors and nurses. ____ ____

9. What kind of bath I have (tub, shower, bed; assisted or unassisted) is up to me and my needs. ____ ____

Hospital routine usually dictates what kind of bath I get. ____ ____

10. The staff avoid my questions about my condition and do not explain very much about it. ____ ____

In my case, I have found that usually I can depend on the staff to answer my questions about my condition. ____ ____

11. I'm usually the last to find out about any changes in my treatment program. ____ ____

The staff talk with me ahead of time about any changes in my treatment program. ____ ____

12. Since I have been in the hospital, I usually have to take my bath at a specific time whether I want to or not. ____ ____

I can usually take my bath at a time I want to. ____ ____

13. I can have something to say about when I am able to use the bathroom. ____ ____

The doctors and nurses do not consult me about my needs or ability to use the bathroom. ____ ____

		As it is	As I prefer
14.	If I smoked, I could have the control over my smoking habits here.	____	____
	Staff have more to say then I do about whether or not I smoke.	____	____
15.	Hospital policy is very strict about where I may go.	____	____
	I am free to go most anywhere in the hospital.	____	____

Title: HEALTH LOCUS OF CONTROL SCALE (HLC)

Author: Wallston, Barbara S., Wallston, Kenneth A., Kaplan, Gordon D., and Maides, Shirley A.

Variable: The variable assessed is the kind and extent of control a person thinks he(she) has over his(her) own state of health.

Description:

Nature and Content: This self-administered instrument is made up of 11 statements that are designed to elicit information about persons' health-related beliefs.

A six-point Likert-type scale is used for responses. The six response categories are: strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, and strongly agree.

Administration and Scoring: No special provisions are necessary for administration of the instrument.

A numerical code of from 1 to 6 is assigned to the six response categories. The responses to questions 1, 2, 8, 10, and 11 must be reversed (subtracted from 7) before being added to the responses to the remaining questions. The total score for the instrument may range from 11 to 66; a high score denotes belief in a high degree of external health locus of control, and a low score denotes belief in a high degree of internal locus of control.

Development:

Rationale: This instrument was developed to provide specific information about the relationship between an individual's health behaviors and that person's belief about the locus of health control. The authors indicated that previous information available about this relationship was inadequate, because it had been derived from instruments whose measures were very general.

Source of Items: The items were based upon a review of the literature and the professional experience of the authors.

Procedure for Development: An original version containing 34 items was administered to 98 college students located at a small southern university. The students also completed Rotter's I-E Scale (Rotter, 1966), the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1964), and a demographic form. All students received psychology credit in return for their participation in this project. The authors indicated that items were retained for inclusion in this instrument if (1) a wide distribution of responses was observed, (2) the item mean was close to the midpoint (3.5) of the scale, (3) the item correlated significantly ($r < 0.20$) with the total scale score, and (4) this item had a low correlation with the Social Desirability score (Wallston et al., 1976).

The revised instrument was administered to three samples of about 100 college students and one sample of about 100 persons from the community in order to provide information on the reliability characteristics of the items. It was also administered to 40 hospital outpatients who were known to be hypertensive, to two groups of 100 college students who participated in experimental studies on hypertension, and to a group of 34 overweight women who were students or staff members at two small private southern colleges. Except for the latter group of respondents and the hypertensive outpatients, all groups were approximately evenly represented by men and women.

Reliability and Validity: Information on the test-retest characteristics of the variable (HLC) measured by the instrument is based on a sample of 22 women who were involved in a weight reduction program over an 8-week interval. The correlation between the test-retest HLC scores for these women was 0.71. Information on the internal consistency (reliability) characteristics of the instrument was derived from four college student groups from one community sample. Each group had approximately 100 respondents. Coefficients alpha for these samples varied from 0.40 to 0.72.

The correlation between HLC and the more general locus of control measure derived from Rotter's instrument varied from 0.25 (N = 85) to 0.46 (N = 34).

The distribution characteristics of HLC are essentially the same for three groups of college students and the single sample of respondents drawn from the community, i.e., the mean score on HLC was typically about 34.00 and the standard deviation was usually 6.00. However, the small sample of hypertensive outpatients had a significantly higher ($p < 0.01$) HLC score than did these other groups of respondents.

Information regarding the relationship between HLC scores, Rotter's I-E classification, and health information seeking behavior is available for two sets of college students. (Health information seeking behavior was operationalized by having subjects choose from among a list of 16 pamphlet titles after having read a threatening message about hypertension and after having taken a difficult knowledge test about the same subject. The greater the number of titles selected to be read by a subject, the greater the amount of information seeking attributed to that subject.) In both of the college student studies, the results indicated that persons who valued their own health and had low HLC scores were more likely ($p < 0.01$) to seek additional health information than was any other group of respondents. No such relationship was noted between the more general measure of locus of control (Rotter, 1966) and the seeking of additional health information in either set of data.

With regard to the persons in the weight reduction program, approximately one-third dropped out of the study prior to its termination. The results indicated that of those who remained, persons assigned to a program group presumed to be congruent with their beliefs were more satisfied with the weight reduction program than were those who had been assigned to a program incongruent with their beliefs. This provides additional evidence of the instrument's validity. However, no significant differences were observed with regard to actual weight lost during the 8-week period of the study.

Use in Research: Except for the testing of the instrument described above, its use has not yet been reported in any published research. However, a number of other investigators are using the HLC scale, and further data will be available (Wallston, personal communication, 1976).

Comments: Initial information regarding the test-retest characteristics of the variable (HLC) measured by this instrument is in line with that available for similar types of tests. However, the sample size was quite small and was involved in a study that would have had some effect upon the results. Therefore, it would be helpful to have test-retest data for a much larger sample of persons not involved in a particular study.

The inter-item characteristics of this instrument appear to be marginal. That is, the average inter-item correlations appear to be consistently low enough to suggest that some of the items are minimally contributing to the total score. Consequently, it would be helpful to have specific information on the inter-item correlation characteristic of this instrument. Such information would make it possible to increase the homogeneity of the measure and thus reduce the number of scores that would fall near the middle of the possible scale simply because the items of the test were answered in an inconsistent fashion.

The response scale suggests a potential source of ambiguity for respondents. That is, a response of "moderately disagree" has the same connotation as "slightly agree." This could be one source of person-item response inconsistency. It would be helpful, therefore, to have information which would indicate the relative power of a measure of HLC when obtained on a 5-point rather than a 6-point response scale.

The results support the author's assumption that the more specific the measure, the more likely it will provide information relevant to a particular problem. However, the items contained in this instrument do not appear to be as statistically independent of a dependent variable such as "seeking additional health information" as they might be. That is, "seeking additional health information" should, perhaps, not be used as part of the measure of HLC in the first place. Therefore, it would be helpful to have additional information more like that available from the weight reduction study.

References:

Crowne, D. P., and Marlowe, D. *The approval motive.* New York: Wiley, 1964.

Rotter, Julian B. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 1966, *80* (1, Whole No. 609).

Wallston, Barbara S., Wallston, Kenneth A., Kaplan, Gordon D., and Maides, Shirley A. Development and validation of the health locus of control (HLC) scale. *Journal of Consulting and Clinical Psychology*, 1976, *44* (4), 580–585.

Wallston, Kenneth A., Maides, Shirley A., and Wallston, Barbara S. Health-related information seeking as a function of health-related locus of control and health value. *Journal of Research in Personality*, 1976, *10*, 215–222.

Source of Information:

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Instrument Copyright: None.

Wallston, Barbara S., Wallston, Kenneth A., Kaplan, Gordon D., and Maides, Shirley A.

HEALTH LOCUS OF CONTROL SCALE (HLC)

This is a questionnaire to determine the way in which different people view certain important health-related issues. Each item is a belief statement with which you may agree or disagree. Beside each statement is a scale which ranges from strongly disagree (1) to strongly agree (6). For each item you are to circle the number that represents the extent to which you disagree or agree with the statement. The more strongly you agree with a statement, then the higher will be the number you circle. The more strongly you disagree with a statement, the lower will be the number you circle. Please circle only one number. This is a measure of your personal beliefs; obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to answer every item. Also, try to respond to each item independently when making your choice; do not be influenced by your previous choices. It is important that you repond according to your actual beliefs and not according to how you feel you should believe.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1. If I take care of myself, I can avoid illness.	1	2	3	4	5	6
2. Whenever I get sick it is because of something I've done or not done.	1	2	3	4	5	6
3. Good health is largely a matter of good fortune.	1	2	3	4	5	6
4. No matter what I do, if I am going to get sick I will get sick.	1	2	3	4	5	6
5. Most people do not realize the extent to which their illnesses are controlled by accidental happenings.	1	2	3	4	5	6
6. I can only do what my doctor tells me to do.	1	2	3	4	5	6
7. There are so many strange diseases around, that you can never know how or when you might pick one up.	1	2	3	4	5	6

		Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
8.	When I feel ill, I know it is because I have not been getting the proper exercise or eating right.	1	2	3	4	5	6
9.	People who never get sick are just plain lucky.	1	2	3	4	5	6
10.	People's ill health results from their own carelessness.	1	2	3	4	5	6
11.	I am directly responsible for my health.	1	2	3	4	5	6

KEY:

Items 3, 4, 5, 6, 7, and 9 are worded in the external direction and are scored from 1 - 6 as they are circled by the subject.

Items 1, 2, 8, 10, and 11 are worded in the internal direction and are reversed scored (by subtracting the circled response from the Number 7).

Total HLC score is the sum of all 11 items after reversing the scores for the internal items. The higher the total score, the more external the beliefs.

Title: HEALTH PERCEPTIONS QUESTIONNAIRE (HPQ)

Author: Ware, John E., Jr.

Variables: This instrument provides information on six variables called *current health, prior health, health outlook, health worry/concern, resistance-susceptibility* and *rejection of sick role. Current health* is defined to mean "... the extent to which the respondent presently sees himself as being healthy or ill." *Prior health* is defined to mean "... whether the respondent perceives a favorable (healthy) or an unfavorable (unhealthy) prior health history." *Health outlook* is defined to mean "... the respondent's prediction of things to come." *Health worry/concern* is defined to mean "... the extent to which the respondent is worried or concerned about his state of health." *Resistance-susceptibility* is defined to mean "... the extent to which the respondent perceives that he is able to resist illness." *Rejection of sick role* is defined to mean "... the respondent's characteristic reaction to illness in terms of the extent to which he accepts the sick role" (Ware, 1976).

Description:

Nature and Content: This is a self-administered instrument of 32 questions that are designed to provide information about persons' beliefs regarding various aspects of their health status. *Current health* is operationally defined by responses to nine questions such as "I feel better now than I ever have before." *Prior health* is operationalized by responses to three questions such as "I was so sick once I thought I might die." *Health outlook* is operationally defined by responses to four questions such as "I will probably be sick a lot in the future." *Health worry/concern* was made up of responses to four questions such as "I never worry about my health." *Resistance-susceptibility* was operationalized by responses to four questions such as "I seem to get sick a little easier than other people." *Rejection of sick role* is operationally defined by responses to eight questions such as "I don't like to go to the doctor."

A 5-point response scale is used to gather responses to the questions contained in this instrument. The five response categories are given a numerical code of from 1 to 5 and are defined, respectively, as definitely false, mostly false, don't know, mostly true, and definitely true.

Administration and Scoring: This instrument is designed to be completed by the respondent, although the items can be orally administered if necessary. It takes 7 minutes to respond to the test questions. The respondent is provided an instruction sheet that indicates how responses are to be marked on the questionnaire.

Scores on the six variables are computed by adding up the responses to the items used to measure that variable. *Current health* is made up of responses to items 1, 4, 9, 12, 17, 22, 26, 30, and 32. The responses to items 9 and 12 must be subtracted from 6 before being added to the sum for this variable. *Prior health* is made up of responses to items 11, 19, and 28. Item 11 must be subtracted from 6 before being added to the other scores for this variable. *Health outlook* is made up of responses to items 5, 10, 18, and 23. Responses to items 5 and 18 must be subtracted from 6 before being added to the score for this variable. *Health worry/concern* is made up of responses to items 6, 13, 20, and 24. The responses to items 6 and 13 must be subtracted from 6 before being added to the score for this variable. *Resistance-susceptibility* is computed by adding together the responses to questions 3, 7, 15, and 29. The responses to items 3 and 29 must be subtracted from 6 prior to being added to the score for this variable. *Rejection of sick role* is made up of responses to items 2, 8, 14, 16, 21, 25, 27, and 31. The responses to items 8, 14, 25, and 31 must be subtracted from 6 prior to being added to the score for this variable.

Development:

Rationale: The implicit rationale for the device is for use in research studies comparing *groups*. It does not appear to be intended for *individual* diagnosis.

Source of Items: No information is provided regarding the source of the items or the content framework upon which they are based.

Procedure for Development: Original instruments were tried out on over 2,000 respondents in 5 different field tests located in 5 different locations in various parts of the United States. Their field tests provided information useful in the revision of the instruments. Items which did not correlate with the prespecified subscales of which they were a part were deleted from the instrument. Items which had skewed distributions were either rewritten to make the distributions more symmetric or were deleted from the instrument.

Reliability and Validity: Reliabilities of the individual items were estimated by test-retest correlations on two of the original field test populations. These single item test-retest correlations ranged from 0.19 to 0.77 with most of the correlations falling between 0.4 and 0.6. Reliability of the eight subscales and of three global scales were estimated by internal consistency reliability coefficients. These internal consistency coefficients ranged from 0.45 to 0.92 for the subscales and from 0.70 to 0.92 for the global scales. Test-retest reliabilities for the eight subscales were also obtained and ranged from 0.41 to 0.86. Two-year stability coefficients for the *current health* subscale, the *resistance-susceptibility* subscale and the *prior health* subscale were also obtained and ranged from 0.45 to 0.62. The 2-year stability coefficient for the general health total, which consisted of the sum of those three scales, was found to be 0.63.

There is some evidence that the instruments are validly measuring what they intend to measure. Factor analytic techniques tended to support a prior hypothesis about interrelationships between the subscales, providing some measure of construct validity to the instruments. Additionally, a number of health related variables not measured by the instrument generally tend to correlate in hypothesized directions with the various subscales in the instruments. It is recommended that anyone intending to use the instrument determine its validity for his own purposes either empirically or by examining the correlational data available from the author of the test.

Use in Research: This instrument is presently being used in other research studies, one of which is being conducted by the Rand Corporation for the Department of Health, Education, and Welfare.

Comments: This instrument appears to have a potential for providing useful information in certain research studies. It appears that the instrument is sufficiently reliable for detecting differences between groups on at least some of the variables measured by the eight subscales. It is also clear from evidence provided with the instruments that the various subscales are measuring different variables. It does not appear that the instrument is intended to be used for making individual diagnoses or for discriminating between individuals, and there is no evidence that, in fact, it would be useful for this purpose. It is recommended that anyone using the instrument obtain the extensive information available from the developer concerning the scales, the subscales, their intercorrelations and their correlations with external variables.

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Ware, J. E. *Scoring procedures, scale to measure perceptions regarding health, Form II.* Personal communication, 1976.

______. *Development and validation of scales to measure perceived health.* Volume II of the Final Report on Contract No. HSM 110–72–299, prepared for the Research Methods Branch, U.S. Department of Health, Education, and Welfare. Carbondale, Ill.: School of Medicine, Southern Illinois University, 1976.

Ware, J. E., Wright, W. R., and Snyder, M. K. *Measures of perceptions regarding health status: Preliminary findings.* Publication No. PB 242–726, National Technical Information Service, Springfield, Va.

Source of Information:

John E. Ware, Jr., Ph.D.
The Rand Corporation
1700 Main Street
Santa Monica, Calif. 90406

Instrument Copyright: None.

Ware, John E., Jr.

HEALTH PERCEPTIONS QUESTIONNAIRE (HPQ)

PLEASE READ EACH OF THE FOLLOWING STATEMENTS, AND THEN CIRCLE ONE OF THE NUMBERS ON EACH LINE TO INDICATE WHETHER THE STATEMENT IS TRUE OR FALSE FOR YOU.

THERE ARE NO RIGHT OR WRONG ANSWERS.

If a statement is definitely true for you, circle 5.
If it is mostly true for you, circle 4.
If you don't know whether it is true or false, circle 3.
If it is mostly false for you, circle 2.
If it is definitely false for you, circle 1.

SOME OF THE STATEMENTS MAY LOOK OR SEEM LIKE OTHERS. BUT EACH STATEMENT IS DIFFERENT, AND SHOULD BE RATED BY ITSELF.

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
A. According to the doctors I've seen, my health is now excellent	5	4	3	2	1
B. I try to avoid letting illness interfere with my life	5	4	3	2	1
C. I seem to get sick a little easier than other people	5	4	3	2	1
D. I feel better now than I ever have before	5	4	3	2	1
E. I will probably be sick a lot in the future	5	4	3	2	1
F. I never worry about my health	5	4	3	2	1
G. Most people get sick a little easier than I do	5	4	3	2	1
H. I don't like to go to the doctor	5	4	3	2	1
I. I am somewhat ill	5	4	3	2	1
J. In the future, I expect to have better health than other people I know	5	4	3	2	1
K. I was so sick once I thought I might die	5	4	3	2	1
L. I'm not as healthy now as I used to be	5	4	3	2	1
M. I worry about my health more than other people worry about their health	5	4	3	2	1

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
N. When I'm sick, I try to just keep going as usual	5	4	3	2	1
O. My body seems to resist illness very well	5	4	3	2	1
P. Getting sick once in a while is a part of my life	5	4	3	2	1
Q. I'm as healthy as anybody I know	5	4	3	2	1
R. I think my health will be worse in the future than it is now	5	4	3	2	1
S. I've never had an illness that lasted a long period of time	5	4	3	2	1
T. Others seem more concerned about their health than I am about mine	5	4	3	2	1
U. When I'm sick, I try to keep it to myself	5	4	3	2	1
V. My health is excellent	5	4	3	2	1
W. I expect to have a very healthy life	5	4	3	2	1
X. My health is a concern in my life	5	4	3	2	1
Y. I accept that sometimes I'm just going to be sick	5	4	3	2	1
Z. I have been feeling bad lately	5	4	3	2	1
AA. It doesn't bother me to go to a doctor	5	4	3	2	1
BB. I have never been seriously ill	5	4	3	2	1
CC. When there is something going around, I usually catch it	5	4	3	2	1
DD. Doctors say that I am now in poor health	5	4	3	2	1
EE. When I think I am getting sick, I fight it	5	4	3	2	1
FF. I feel about as good now as I ever have	5	4	3	2	1

Client Affective Variables: Anxiety, Depression

Title: THE BECK DEPRESSION INVENTORY (BDI)

Author: Beck, Aaron T.

Variable: The variable being measured is depression. Depression is operationally defined by the following attributes:

1. A specific alteration in mood;
2. A negative self-concept associated with self-reproaches and self-blame;
3. Regressive and self-punitive wishes;
4. Vegetative changes; and
5. Change in activity level.

Description:

Nature and Content: The BDI is available in both long- and short-form questionnaires. The long form consists of 21 items, while the shortened version consists of 13 items. The response alternatives for each item are defined by a 4-point (0–3) ordered scale. Each of the possible responses is uniquely defined by a statement describing the respondent with respect to the item. The items each correspond to a specific manifestation of depression. For instance, Item A (Sadness) has the following response alternatives:

0—I do not feel sad.

1—I feel sad or blue.

2.—I am blue or sad all the time and I can't snap out of it.

3—I am so unhappy that I can't stand it.

Administration and Scoring: The BDI is self-administered and the subject should possess a high school reading level. The BDI can also be administered orally. The complete BDI takes approximately 10 to 15 minutes to complete, while the short form takes approximately 5 minutes to complete. The BDI is scored by summing the individual responses. Thus for the long form, the total score has a range of 0–63. The total score on the short form can be adjusted in order to be compatible with the long form.

Development:

Rationale: No specific theory is used as a rationale. The motivation for developing this instrument lies in the need for a standardized means of assessing depression. The author recognizes the value of clinical judgments of depression while simultaneously acknowledging the disadvantages of the clinical approach. An instrument such as the BDI provides a standardized consistent measure that does not rely on the theoretical orientation of the interviewer. The BDI is also more economical than the psychiatric interview, and it provides a numerical score which can be used for comparison purposes.

Source of Items: The items in the BDI were primarily clinically derived. Systematic observations and records were made regarding the characteristic attitudes and symptoms of depressed patients. Those attitudes and symptoms which appeared to be specific for depression, and those that were consistent with descriptions in the psychiatric literature were selected.

Procedure for Development: On the basis of the above selection process, 21 categories of symptoms and attitudes were selected. The items and the alternatives within each item were chosen on the basis of their relationship to the overt manifestations of depression.

Consensus on the appropriateness of response alternatives was accomplished by having a panel of psychiatrists judge different psychiatric patients with respect to severity on the different categories.

The samples which were used in the development and testing of the BDI were taken from a population of 598 patients in the psychiatric and outpatient services of the Philadelphia General Hospital.

Reliability and Validity: Internal consistency was evaluated by comparing item scores and total scores for each patient (N = 200). Using the Kruskal-Wallis Non-Parametric Analysis of Variance by Ranks, all items were found to have a significant correlation with the total score.

Split-half reliability was computed (N = 97) and the Spearman-Brown reliability coefficient of 0.93 was obtained.

The stability of the instrument was tested by administering the BDI twice, at an interval of 4 weeks, to a group of 38 patients. Clinical judgments of the patients' depth of depression were concurrently made. Changes in BDI scores were found to parallel changes in clinical ratings.

Concurrent validity was tested by correlating BDI scores with other measures of depression. Within a wide range of studies, the BDI was found to correlate 0.65 with clinicians ratings, 0.75 with the MMPI-D scale and 0.75 with Hamilton's Rating Scale for Depression. Other correlations reported include: 0.55 with the depression-anxiety scale, 0.66 with the depression scale of the Multiple Affect Adjective Checklist, and 0.76 with the Zung Self-Rating Depression Scale.

Construct validity was examined by comparing outcomes of the BDI with scores on other measures considered to be indicators of depression. Significant relationships are reported in the literature with "negative self-concept," "identification with the loser," "pessimism," and a "hostility-inward" scale.

Use in Research: The BDI (also referred to as DI) has been used in more than 100 published research studies. For a more detailed description of the tool's development and a list of references to other studies, the reader should see "Assessment of Depression: The Depression Inventory" (Beck and Beamesderfer, 1974).

The inventory can be completed by the subject in as short a time as 5 minutes for the short form. It, therefore, has an excellent potential as a quick and easy aid in detecting the individual suffering from depression in cases where an evaluation might otherwise have not been made.

References:

Beck, A. T. *Depression: Causes and treatments.* Philadelphia: University of Pennsylvania Press, 1972.

Beck, A. T., and Beamesderfer, A. Assessment of depression: The depression inventory. *Psychological Measurements in Psychopharmacology*, 1974, *7*, 151–169.

Beck, A. T., and Beck, R. W. Screening depressed patients in family practice: A rapid technique. *Postgraduate Medicine*, 1972, *52* (6), 81–85.

Source of Information:

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Instrument Copyright: Aaron T. Beck, Ph.D.

Beck, Aaron T.

THE BECK DEPRESSION INVENTORY (BDI)

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

Case Number: Name ________________________________

_ _ _ _ _ 5
1 2 3 4 5 6 Date ________________________________

7 ( ) A.
0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

8 ( ) B.
0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

9 ( ) C.
0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

10 ( ) D.
0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

11 ( ) E.
0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

12 ( ) F.
0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

13 ( ) G.
0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

14 ( ) H.
0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

15 ( ) I.
0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

16 ( ) J.
0 I don't cry anymore than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

17 ( ) K.
0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

18 ( ) L.
0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

19 ( ) M.
0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

20 ( ) N.
0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

21 ( ) O.
0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

22 ( ) P.
0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

23 ( ) Q.
0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

24 ( ) R.
0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

25 ( ) S.
0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.

I am purposely trying to lost weight by eating less. Yes___No___

26 ( ) T.
0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems, that I cannot think about anything else.

27 ( ) U.
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

____
Time elapsed since clinical interview.

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Title: EVALUATION OF EMOTIONAL TENSION ON ADMISSION IN LABOR

Author: Crawford, Mary I.

Variable: The instrument evaluates the emotional tension of a woman in labor at the time of hospital admission.

Description:

Nature and Content: This is a 4-item, observer-completed rating scale. Symptoms of anxiety are evaluated by the nurse's observation of four "signs" between the patient's labor contractions, i.e., (1) expressed fear of labor; (2) behavioral symptoms (voice tremulous, quivers, or breaks; pupils dilated; crying, seems near tears; unable to concentrate on what you say; jittery; easily startled; acts as if fearful; seems overly shy or timid); (3) systolic blood pressure on admission in labor minus blood pressure on last visit to antepartal clinic; and (4) pulse rate on admission in labor. A score of 0, 1, 2, or 3 is assigned for each sign; a cumulative score of 10 indicates the highest possible emotional tension.

Administration and Scoring: No special provisions are necessary for administering the instrument. Nurses who were interviewed as part of a pilot study reported no difficulty in using this instrument as part of the admission procedure, nor did they feel it required the length of time required to admit a woman in labor (Crawford, 1968).

Scoring is on a four-point scale. Two of the signs are scored from 0–3, and two from 0–2, making a total possible score of 10. A cumulative score of 10 indicates the highest possible emotional tension.

Development:

Rationale: The relationship between anxiety, as it is evaluated during pregnancy, and disturbances during labor has been the subject of many investigations. Positive relationships have been reported between scores on different kinds of anxiety tests administered during pregnancy and maternal-fetal, and/or neonatal complications of labor (Davids and De Vault, 1962; Grimm, 1961; Klein, 1963; and McDonald et al., 1963).

Source of Items: The items were based on a review of the literature and the professional experience of the author.

Procedure for Development: No information was provided.

Reliability and Validity: Thirty-nine women were rated on physiological and behavioral symptoms of anxiety during labor by two nurses. The Pearson product-moment correlation between these two sets of ratings was 0.51.

This measure was used by the author in conjunction with her Questionnaire on Symptoms of Muscle Tension, and, when "both instruments" are mentioned, the reference is to that combination.

Use in Research: This instrument, along with the Evaluation of Muscle Tension Questionnaire, was designed as a screening tool which nurses could use to help determine the need of women for emotional support during labor (Crawford, 1968). Results of this study appear in an article in the *Bulletin of the Sloane Hospital for Women*, Vol. 14, Winter 1968, entitled "Physiological and Behavioral Cues to Disturbances in Childbirth."

Comments: This measure deals with the kind of situational observations which the sensitive obstetrical nurse makes daily. However, it is a beginning in which observations are systematized and quantified. This instrument is still in very early stages of psychometric development; psychometric attention should be directed toward refining the items, developing more objective scoring criteria, and further establishing the reliability and validity of the instrument.

A significantly higher number of women were found to develop physiological disturbances related to hypoxia if they scored above the median on ratings of emotional tension in labor. Emotional tension in labor, however, was not the only factor involved in the prediction of whether or not physiological disturbances would develop. Predictions were much more accurate if muscle tension scores, based on the author's other instrument, were also used during pregnancy. These latter scores were assumed to represent an index of whether or not the woman had developed a habit of responding to anxiety with physiological symptoms. The findings support Breggin's theory that patterns of responding to anxiety with sympathomimetic symptoms result in learned associations, and that these symptoms themselves can elicit and reinforce further anxiety, producing a self-generating, spiraling anxiety reaction. The greater the anxiety, the more severe the sympathetic nervous system response likely to occur.

The relationship found between anxiety symptoms and fetal hypoxia supports the theory that anxiety results in vasoconstriction and a reduction in oxygen supply to the fetus.

Using the two instruments together, the author was able to select from the subjects in her study one woman out of five, predict that she or her infant would develop physiological disturbances, and be correct more than half the time (Crawford, 1968).

References:

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McDonald, Robert, Gynther, Malcolm, and Christakos, Arthur. Relations between maternal anxiety and obstetric complications. *Psychosomatic Medicine*, 1963, *25*, 357–363.

Source of Information:

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Instrument Copyright: Mary I Crawford, R.N., Ed.D.

Crawford, Mary I.

EVALUATION OF EMOTIONAL TENSION ON ADMISSION IN LABOR

While admitting this woman in labor, evaluate the following four signs in between contractions and assign a score of 0, 1, 2, or 3 for each sign. A cumulative score of 10 indicates the highest possible emotional tension.

Sign	0	1	2	3	Score
Expressed Fear of Labor (See English and Spanish Questions on Back of Sheet)	None Expressed	Expressed Fear for Baby or Expressed Fear but Unable to Describe	Expressed Fear for Self (hemorrhage, long labor, pain, death, etc.)		
Behavioral Symptoms: __Voice Tremulous, Quivers, or Breaks __Pupils Dilated = at least ½ Diameter of the Iris __Crying __Seems near Tears __Unable to Concentrate on What You Say __Jittery, Easily Startled __Acts as if Fearful __Seems Overly Shy or Timid	None of these Symptoms Noted	One of these Symptoms Noted	Two or More of these Symptoms Noted		
Systolic Blood Pressure on Admission in Labor Minus Systolic Blood Pressure on Last Visit to A.P. Clinic	Less than +3	+3 – +15	+16 – +28	More than +28	
Pulse Rate on Admission in Labor	Less than 87	87 – 97	98 – 108	More than 108	

Total ———

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Title: EVALUATION OF MUSCLE TENSION QUESTIONNAIRE

Author: Crawford, Mary I.

Variable: The instrument assesses the severity of muscle tension and other subjective symptoms experienced during a 2-week period of the third trimester of pregnancy.

Description:

Nature and Content: This self-administered questionnaire is made up of 14 items, seven in each of two groups. The respondent is asked to recall various discomforts she may have experienced during a 2-week period and the duration of each symptom. The five response choices are keyed to the number of days the discomfort was experienced.

Administration and Scoring: No special provisions are necessary for administration of the questionnaire, and approximately 5 minutes are required for completion.

Responses are scored by assigning a point value for each answer as follows: none = 0 points, 1–3 days = 1 point, 4–7 days = 2 points, 8–11 days = 3 points, 12–14 days = 4 points. The points are summed to provide a total score for each respondent; the higher the total score, the higher the incidence of symptoms of muscle tension.

Development:

Rationale: Crawford (1968) cites the large number of studies that suggest "anxiety is associated with increased muscle tension which is, in turn, accompanied by subjective complaints of pain and discomfort in the muscle or muscles involved."

Source of Items: The items were derived from an interview schedule used by Sainsbury and Gibson (1954) to assess clinical evidence of muscle tension in patients.

Procedure for Development: The author adapted the Sainsbury and Gibson (1954) interview guide for her purposes and population, then refined it as the result of two pilot studies. No details of the two pilot studies were provided.

Reliability and Validity: In a pilot study, 59 women completed a second copy of the questionnaire 4 weeks after having completed the first one. The test-retest correlation was $r = 0.64$ for a 1-month interval.

This measure was used by the author in conjunction with her Rating Scale of Emotional Tension on Admission in Labor, and, when "both instruments" are mentioned, the reference is to that combination.

A significantly higher number of women were found to develop physiological disturbances related to uterine dysfunction, or their infants were found to develop physiological disturbances related to hypoxia, if they scored above the median on ratings of emotional tension in labor. Emotional tension in labor, however, was not the only factor involved in the prediction of whether or not physiological disturbances would develop. Predictions were much more accurate if muscle tension scores during pregnancy were also used. These scores were assumed to represent an index of whether or not the woman had developed a habit of responding to anxiety with physiological symptoms. The findings support Breggin's (1964) theory that patterns of responding to anxiety with sympathomimetic symptoms result in learned associations, and that these symptoms themselves can elicit and reinforce further anxiety, producing a self-generating, spiraling anxiety reaction.

The relationship found between anxiety symptoms and fetal hypoxia supports the theory that anxiety results in vasoconstriction and a reduction in oxygen supply to the fetus.

Using the two instruments together, the author was able to select from the subjects in her study one woman out of five, predict that she or her infant would develop physiological disturbances, and be correct more than half the time (Crawford, 1968).

Use in Research: This questionnaire, along with the one for Evaluation of Emotional Tension on Admission in Labor, was designed as a screening tool which nurses could use to help determine the need of women for emotional support during labor (Crawford, 1968). Results of this study appear in the Crawford article referenced below.

Comments: This instrument appears to be easy for a nurse to administer. However, any potential user should examine each item carefully for its relationship to the concept under study, i.e., muscle tension. The instrument could perhaps more accurately be considered a measure of subjective symptoms of anxiety. Psychometric attention is indicated.

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Instrument Copyright: Mary I. Crawford, R.N., Ed.D.

Crawford, Mary I.

EVALUATION OF MUSCLE TENSION QUESTIONNAIRE

The answers to the following questions will help us to plan for your care during labor. All the questions can be answered in five minutes. It is important that each question be answered as accurately as possible. Simply think back over the past two weeks and check the number of days that you can remember having each of the following discomforts.

On how many days during the *past two weeks* have you felt

1. any pain, stiffness or aching in your back which lasts an hour or more?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
2. any pain, stiffness, cramping or aching in your neck or shoulders?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
3. any pain, stiffness, cramping or aching in your arms?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
4. any tightness or pain around your heart?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
5. sick at your stomach or nauseated?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
6. tense, restless, and unable to relax?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
7. irritable and touchy?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___

On how many days during the *past two weeks* have you noticed

1. any diarrhea or watery bowel movements?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
2. that things looked blurred?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
3. any flushing, or felt any hot sensations?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
4. a feeling of numbness in your hands or face?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
5. any tremor or trembling feeling in your hands?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
6. any clicking or ringing in your ears?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___
7. yourself jumping at noises or waking up with a jerk?	None___	1-3 days___	4-7 days___	8-11 days___	12-14 days___

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Title: BEHAVIORAL RATING CHECKLIST FOR NURSING PERSONNEL

Author: Garrity, Thomas F., and Klein, Robert F.

Variable: The presence or absence and degree of unresolved emotional distress of coronary-care unit patients during the acute phase of myocardial infarction is the variable. Emotional distress or upset and positive behavior are operationally defined by the 21 patient behaviors listed on the instrument. The acute phase of myocardial infarction is defined as the first 5 days of hospitalization following the attack.

Description:

Nature and Content: The instrument is an observational rating scale to be used by nursing personnel to rate the extent to which certain behavior traits are exhibited by patients. It consists of 18 items descriptive of behavioral disturbance, such as anxiety, hostility, and depression (items 1 through 21). Each item is scored on a 5-point scale (0 to 4) depending upon the intensity of the particular trait. The response choices are: absent, slightly, moderately, much, and extremely. The nurse rates the patient on all items and also records the date and the shift on which the rating was made.

Administration and Scoring: Observations of the patient's behavior are made during the acute phase of the heart attack, that is, during the first 5 days following hospitalization for the attack. The observation should begin with the patient's admission and continue at regular intervals during the next 5 days. Using separate checklists, observations are to be recorded on each patient by two independent observers--one at the end of the 7 a.m.–3 p.m. shift, and one at the end of the 3 p.m.–11 p.m. shift. The raters who used the original checklist were trained over a 1-year period, during which the development and testing of the instrument took place. During the development, raters were required to use the checklist with patients under their care and to defend their ratings in weekly staff meetings with a research psychiatrist and a behavioral scientist. By the end of the training, raters were consistent, as a group and as individuals, in labeling given behavior according to checklist items (Garrity and Klein, 1975).

The scores for the individual items on the checklist are grouped by addition into a single measure of behavioral disturbance (items 1 through 18) and a single measure of positive behavior (items 19 through 21) for each patient. These two measures are graphed over the 5-day observation period. The graphs are then used to sort the patients into two groups called nonadjustment and the adjustment groups. (The group names are simply labels which are descriptive of manifest behavior and are not meant to characterize any deeper levels of psychological adjustment.) Graphs sorted into the nonadjustment group show either great behavioral disturbance and little positive behavior over the 5 days of observation, or increasing behavioral disturbance and decreasing positive behavior. Graphs sorted into the adjustment group show either little behavioral disturbance or great positive behavior over the 5-day period, or decreasing behavioral disturbance and increasing positive behavior.

Development:

Rationale: Psychosomatic research leaves little doubt that emotions are a factor in the pathogenesis, onset, and complications of acute myocardial infarction. The works of Rosenman (1974) have studied the associations between coronary artery disease, selected risk factors, and habitual types of behavior, so-called Type A and Type B patterns. Carefully controlled statistical studies have shown that behavior patterns are an independent risk factor capable of increasing coronary risk alone and in concert with other classical risk factors, e.g., heredity, diet, smoking, weight, exercise, etc.

These and other findings seem to suggest that mind-body linkages in cardiac disease might affect long-term rehabilitation, as well as the development and precipitation of the acute myocardial infarction (AMI). In a study to examine the possible correlation between unresolved emotional distress as evidenced by post-attack behavior and survival after 6 months, the authors developed this instrument as a means of measuring such behavioral distress or upset (Garrity and Klein, 1975).

Source of Items: The checklist is similar to that reported by Bunney and Hamburg (1963).

Procedure for Development: The items of the Bunney and Hamburg (1963) checklist were modified to reflect types of behavior typical of patients in a coronary care facility. In constructing the checklist, items requiring a great deal of inference on the part of the observer were minimized. The development and testing of the checklist and the training of raters took place over a 1-year period of time.

Reliability and Validity: The interrater reliability on each of the 21 items on the checklist was significant at the 0.01 level. The correlation between two observers simultaneously rating a bedridden cardiac patient (as depicted in a 15-minute film segment) was 0.64, using the composite 18-item behavior disturbance score. When observers rated patients in the actual hospital ward setting, the correlation was 0.42.

Discriminatory validity of the instrument is reflected by Garrity and Klein (1975) having found that the pattern of behavior adjustment, as assessed by the instrument during the post-attack period, was a significant predictor of 6-month mortality (F = 6.94; significant at 0.05 level; N = 48).

Use in Research: Garrity and Klein used the instrument in their 1975 study "Emotional Response and Clinical Severity as Early Determinants of Six-Month Mortality After Myocardial Infarction" which suggests that psychic factors do affect 6-month mortality rates after myocardial infarction.

Comments: The instrument is brief, straightforward, and is made up of behavioral and non-behavioral characteristics which research seems to indicate are important in coronary-prone behavior and/or the ability to adjust to AMI. However, the validity and reliability of the instrument depend greatly upon the skill and training of the raters. The author stated that the raters for his study were trained over a 1-year period. Any potential user might consider developing a videotape for training raters and thus shortening the time required. Psychometrically, the items should be refined so that they are phrased in parallel forms. Also, each item should be operationally defined in explicit terms. As they now stand, i.e., withdrawn, quiet, unfriendly to others, impolite to others, etc., they require value judgments on the part of the rater. This could decrease the reliability of the instrument to an unacceptable level for some researchers. It would be more accurate to rename the instrument a rating scale, since it requires a rating of the degree of possession of each characteristic.

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BEHAVIOR RATING CHECKLIST FOR NURSING PERSONNEL

Date Shift Patient

Rater History

Please indicate to what extent the following items were present in the patient during this shift. Check the appropriate place on each scale.

	Absent	Slightly	Moderately	Much	Extremely
1. Anxiety.	—	—	—	—	—
2. Restless.	—	—	—	—	—
3. Tense.	—	—	—	—	—
4. Seems afraid of something.	—	—	—	—	—
5. Becomes upset easily.	—	—	—	—	—
6. Seeks reassurance from personnel.	—	—	—	—	—
7. Hostility.	—	—	—	—	—
8. Unfriendly to others.	—	—	—	—	—
9. Impolite to others.	—	—	—	—	—
10. Complains.	—	—	—	—	—
11. Objects to some routine procedures.	—	—	—	—	—
12. Angry.	—	—	—	—	—
13. Depression.	—	—	—	—	—
14. Seems to feel rejected.	—	—	—	—	—
15. Sad appearance.	—	—	—	—	—
16. Withdrawn.	—	—	—	—	—
17. Quiet.	—	—	—	—	—
18. Talks of gloomy things.	—	—	—	—	—
19. Calm.	—	—	—	—	—
20. Cheerful.	—	—	—	—	—
21. Friendly.	—	—	—	—	—

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Title: SYMPTOM RATING TEST (SRT)

Author: Kellner, Robert, and Sheffield, Brian F.

Variable: The variable is patients' perceptions of distress defined as a temporary and changeable state. In this instrument, distress is assessed by patients' self-ratings on a total distress score and four subcategories (anxiety, depression, somatic symptoms, and inadequacy).

Description:

Nature and Content: This self-administered, 30-item instrument consists of words and phrases descriptive of a wide variety of feelings or symptoms a patient may be experiencing or may have experienced in the past.

Anxiety is determined by responses to eight items such as "Scared, frightened." *Depression* is operationalized by responses to eight items such as "No hope." *Somatic symptoms* are operationalized by responses to seven items such as "Chest pains." *Inadequacy* is operationalized by responses to seven items such as "Inferior to others." For each item, a Yes-No format is presented on the left side of the page, such as "Have you felt dizzy or faint?" On the right side of the page is a corresponding Likert-type scale with a question such as "How often have you felt dizzy or faint?" Respondents are instructed to mark the Likert Scale for each item they have checked "Yes."

Administration and Scoring: No special provisions are necessary for administration of the instrument. Approximately 20 minutes are necessary to complete the test. Respondents are asked to describe how they have felt during the past week or day, depending upon the version of the instrument being used. A numeric code from 1–4 is assigned to the response categories, i.e., 1 = not at all; 2 = a little, slightly; 3 = a great deal, quite a bit; 4 = extremely, could not have been worse.

The score for *anxiety* is the sum of the scores of items 3, 5, 9, 16, 19, 23, 26, and 29. *Depression* is the sum of the scores of items 2, 6, 8, 12, 18, 24, 25, and 30. *Somatic* score is the sum of items 1, 4, 7, 11, 14, 21, and 27, and *inadequacy* score is the sum of items 10, 13, 15, 17, 20, 22, and 28. The total score is made up of responses to items 1–30. The scores for *anxiety* and *depression* can range from 0 to 32. The scores for *somatic* and *inadequacy* can range from 0 to 28. The total score can range from 0 to 120.

Development:

Rationale: The instrument was developed to provide measures of changes in distress in research, such as in drug trials.

Source of Items: The items were based on symptoms of distressed patients; the subcategories were based on a review of the literature of factor analyses of symptoms of emotionally distressed patients.

Procedure for Development: A checklist was compiled from the complaints of 100 consecutive neurotic patients. The responses for self-ratings were chosen from expressions used by patients. Initially, each symptom was rated on three dimensions—intensity, frequency, and duration, with the aid of test cards. As a result of experience and extensive testing with the test card version of the instrument, the scales were further refined and a pencil-and-paper version was constructed.

The instrument was then administered to several groups of normal patients and psychiatric patients. Scores on the instrument were also compared with other pencil-and-paper tests such as the Taylor Manifest Anxiety Scale (Taylor, 1953) and the Eysenck Personality Inventory (Eysenck and Eysenck, 1964). Finally, the relationship between the scores, psychiatrists' ratings, and the effects of drug treatments were examined. As a result of these studies, the pencil-and-paper version was simplified and abridged; this final form became the Short Version of the SRT.

Reliability and Validity: Test-retest information was available only for the total score derived from the instrument. Twenty-eight neurotic outpatients and 40 neurotic inpatients completed the instrument on two occasions, 24 hours apart. The results indicated a high degree of similarity in scores on the total score: $r = 0.94$ and 0.92, respectively, for these two groups. The split-half reliability of changes in SRT scores in neurotic patients after 1 month of treatment was $r = 0.89$.

Spearman rank order correlations between scores on this instrument, the Taylor MAS score, and the Eysenck Personality Inventory Neuroticism score ranged from 0.41 to 0.75. In all studies, the scores of psychiatric patients on this test were significantly higher ($p < 0.001$) than were those of their controls who were not psychiatric patients. The test scores discriminated significantly between diagnostic categories of psychiatric patients. Patients suffering from endogenous depression scored significantly higher than neurotic patients; the latter scored significantly higher than alcoholics, and alcoholics scored significantly higher than normals. The scores varied significantly in schizophrenic patients with changes in treatment. The scores discriminated significantly between the responses to electroconvulsive therapy of patients with endogenous depression and those with exogenous depression. In anxious patients, the scores were negatively correlated with the blood level of benzodiazepines. The percentage of persons incorrectly identified to be neurotic or normal by their test scores ranged from 11 percent to 28 percent, depending upon the subscale. The best identification occurred for the total score, anxiety score, and depression score, which ranged from 85 percent to 89 percent of the respondents who were correctly classified. These results were from 5 percent to 6 percent more accurate than the Taylor and Eysenck measures.

Scores on this instrument for several groups of patients who had had drug therapy were significantly lower ($p < 0.001$) after treatment than before. After treatment, the scores were still significantly higher than those for normal respondents. There was also a moderate to high correlation between psychiatrists' ratings of their patients on the Hamilton Anxiety Rating Scale (Hamilton, 1959) and SRT self-rating scores. In drug trials, the instrument was found to be effective in discriminating between the effects of psychotropic drugs and those of placebo.

Use in Research: This instrument has been used in a large number of research studies. Recent lists of these studies are available in Kellner and Sheffield (1973 and 1976).

Comments: The instrument appears to have some potential for measuring change over a period of time. Nevertheless, the reader should note that although the authors purport to measure "distress" (a temporary and changeable state) as distinct from a "trait" (a long-standing disposition), much of the validity data they offer show a relationship to variables that are not considered temporary states, e.g., neuroticism.

The information available regarding the relationship between scores on this instrument and those of other instruments is rather complete and congruent with what would be expected. It would be helpful to have information on the short-term, test-retest reliability characteristics of the subcategories measured.

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Eysenck, J. J., and Eysenck, S. B. G. *Manual of the Eysenck personality inventory.* London: University of London Press, 1964.

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Instrument Copyright: Robert Kellner, M.D., Ph.D., and Brian F. Sheffield

Kellner, Robert, and Sheffield, Brian F.

SYMPTOM RATING TEST (SRT)

How have you felt during the past week? today? Please answer all questions. Draw a circle around your answer like this: [✓ Yes] No

Do not think long before answering. You will be asked more about these questions later. Work quickly! Do not read any of the forms you have filled in previously.

1. Have you felt dizzy or faint? .... Yes No

2. Have you felt tired or felt a lack of energy? .... Yes No

3. Have you felt nervous? .... Yes No

4. Have you experienced feelings of pressure or tightness anywhere in your head or body? .... Yes No

5. Have you been scared or frightened? .... Yes No

6. Has your appetite been poor? .... Yes No

7. Has your heart tended to beat quickly or strongly without reason? (throbbing or pounding) .... Yes No

How have you felt during the past week? today?

Check all the questions you have answered "Yes" on the page on your left and describe your complaint by drawing a circle around your answer like this:

What has your headache been like during the past week?

Slight- a little	Bad- unpleasant	[✓ Very bad- very distressing]	Unbearable-couldn't have been worse

You can put the circle anywhere along the line. Do not think long before answering. Work quickly!

1. How often have you felt dizzy or faint?

Only a few times	Often	Very often or most of the time	All the time

2. What has your energy been like?

Only slightly lacking in energy	Tired	Very tired- everything was an effort	Extremely tired - could not do anything

3. How nervous have you felt?

A little	A great deal- quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

4. What has the pressure or tightness been like?

Slight- a little	Bad- unpleasant	Very bad- very distressing	Unbearable- couldn't have been worse

5. How scared or frightened have you been?

A little	A great deal- quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

6. What has your appetite been like?

Slightly off my food	Did not enjoy my food at all	Could hardly face food	Have not eaten anything at all

7. What has your heartbeat (throbbing or pounding of the heart) been like?

Slight- a little	Bad- troublesome	Very bad- very distressing	Extremely distressing-couldn't have been worse

8. Have you had a feeling of hopelessness or the feeling that there was no hope for you? ...... Yes No

9. Have you felt restless or jumpy? ...... Yes No

10. Has your memory been poor? ...... Yes No

11. Have you had chest pains, breathing difficulties or felt you have not had enough air? ...... Yes No

12. Have you felt guilty over some matters? ...... Yes No

13. Have you been worrying? ...... Yes No

14. Have you had muscle pains, aches, or rheumatism? ...... Yes No

15. Have you felt that people looked down on you or thought badly of you? ...... Yes No

16. Have you had spells of trembling or shaking? ...... Yes No

17. Have you had difficulty in thinking clearly or difficulty in making up your mind? ...... Yes No

Check again the questions you have answered "Yes" on the page on your left and describe again your complaints by drawing a circle anywhere along the line.

8. How often have you had this feeling of hopelessness?

Only a few times	Often	Very often or most of the time	All the time

9. How restless or jumpy have you been?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

10. What has your memory been like?

A little unsatisfactory	Unsatisfactory	Very unsatisfactory-very bad	Extremely bad-couldn't have been worse

11. What have your chest pains or your breathing difficulties been like?

Slight-a little	Bad unpleasant	Very bad-very distressing	Extremely distressing couldn't have been worse

12. What has the feeling of guilt been like?

Slight-a little	It has been bad	It has been very bad	Extremely bad-couldn't have been worse

13. How much have you been worrying?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely-couldn't have been worse

14. What have the aches and pains been like?

Slight-a little	Bad-unpleasant	Very bad-very distressing	Unbearable-couldn't have been worse

15. How much did this feeling(did people look down on you or think badly of you) bother you?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

16. How much have you been trembling or shaking?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely-couldn't have been worse

17. How often have you had difficulty in thinking clearly or making up your mind?

Only a few times	Often	Very often or most of the time	All the time

18. Have you felt at times unworthy or a failure? ...... Yes No

19. Have you felt tense or "wound up"? ...... Yes No

20. Have you felt inferior to other people? ...... Yes No

21. Have parts of your body felt numb or tingling? ...... Yes No

22. Have you been irritable? ...... Yes No

23. Have you had thoughts which you could not push out of your mind? ...... Yes No

24. Have you found at times that you have lost interest in most things? ...... Yes No

25. Have you felt unhappy or depressed? ...... Yes No

26. Have you had attacks of panic? ...... Yes No

Check again the questions you have answered "Yes" on the page on your left and describe again your complaints by drawing a circle along the line.

18. How much has this feeling (of being unworthy or a failure) bothered you?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

19. What has the tension or wound-up feeling been like?

Slight-a little	Bad-unpleasant	Very bad-very distressing	Unbearable-couldn't have been worse

20. How much has this feeling (of being inferior to others) bothered you?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

21. What has the numbness or tingling been like?

Slight-a little	Bad-unpleasant	Very bad-very distressing	Unbearable-couldn't have been worse

22. How irritable have you been?

A little	A great deal-quite a bit	A very great deal-it has been very bad	Extremely couldn't have been worse

23. How often have the thoughts which you could not push out of your mind been bothering you?

Only a few times	Often	Very often or most of the time	All the time

24. How bad was the feeling that you have lost interest?

A slight loss of interest	Only a few things have interested me	Hardly anything has interested me	I couldn't care about anything

25. How depressed or unhappy have you been?

A little	It has been bad	It has been very bad	It could not have been worse

26. What have the attacks of panic been like?

Slight-a little	Bad-troublesome	Very bad-very distressing	Extremely bad-couldn't have been worse

27. Have parts of your body felt weak, for example: arms or legs? ...... Yes No

28. Have you felt that you couldn't concentrate? ...... Yes No

29. Have you found it difficult to fall asleep? Was your sleep restless, or did you have nightmares? ...... Yes No

30. Have you woken up too early and could not sleep again? ...... Yes No

Check again the questions you have answered "Yes" on the page on your left and describe again your complaints by drawing a circle anywhere along the line.

27. How weak have you (or your arms, legs, etc.) felt?

A little	A lot- a great deal	A very great deal-it has been very bad	Could not move at all

28. What has your concentration been like?

A little unsatisfactory	Unsatisfactory-poor	Very unsatisfactory-very bad	Extremely bad-couldn't have been worse

29. What has your sleep been like?

My sleep was a little restless or it took a little time to fall asleep	My sleep was restless or it took a long time to fall asleep	My sleep was very restless or it took an extremely long time to fall asleep	I have not slept at all

30. How early did you wake up?

I woke up somewhat early	I woke up very early	I woke up soon after falling asleep	I have not slept at all

SCORING INSTRUCTIONS FOR THE SYMPTOM RATING TEST

(Pencil and Paper Form)

Both Check List (left hand pages) and self-ratings (right hand pages) should be scored.

1) Check List Total Score (left hand pages): Score one for each "yes".

2) S.R.T. Total Score (right hand pages; score from left to right 1,2,3 or 4): Sum of the self-rating scores.

Subscales

a) Anxiety Subscale: Sum of self-ratings of items: 3,5,9,16,19,23,26 and 29.

b) Depression Subscale: Sum of self-ratings of items: 2,6,8,12,18,24,25 and 30.

c) Somatic Subscale: Sum of self-ratings of items: 1,4,7,11,14,21 and 27.

d) Inadequacy Subscale: Sum of self-ratings of items: 10,13,15,17,20,22 and 28.

Subscales are scored both for the Check List (left hand pages) and for the self-ratings (right hand pages).

Scoring Sample Attached.

FORMS OF THE S.R.T.

The only difference between the various forms of the SRT as used in recent studies is in the initial instruction. For example, the "Week Form" begins with the sentence, "Describe how you have felt during the past week", the "Day Form" with the sentence, "How have you felt today?", etc.

The forms are changed by crossing out the words either "past week" or "today" in the first sentences on pages 1 and 2.

For further information about the forms see: Kellner, R. and Sheffield, B. F.: A self-rating scale of distress. Psychological Medicine 3:88-100, 1973.

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Title: GAME TO IDENTIFY HOSPITALIZED CHILDREN'S PERCEPTION OF STRESS

Author: Menke, Edna M.

Variable: This "game" is designed to measure stress in hospitalized children. Stress is operationally defined as the responses that the child gives to the stimuli in the game and questions which connote a "stressful" perception.

Description:

Nature and Content: The game is a projective technique consisting of 19 plastic cards with colored drawings of stimuli related to the child's hospitalization and four questions about the hospital experience.

Each of the following stimuli are presented on a separate card: boy, girl, mother, father, baby, dog, cat, nurse, doctor, hospital gown, hospital room, hospital bed, food, medications, toys, thermometer, stethoscope, house, and school.

Administration and Scoring: It takes approximately 30 to 60 minutes to play the game; the time is determined by the length of time the subject is willing to play. The game can be played with only one child at a time, and the play session is tape recorded. The contents of the tapes are analyzed, and the child's responses are coded for stress. A child's response is labeled as a "stressful" perception if any of the following words are used: annoys, bothers, dislikes, disturbs, feels anxious, hates, hurts, irritates, misses, threatens, uncomfortable, and upset. A child's response is labeled "nonstressful" if none of these words are used. A child's response is labeled "no reaction" if the child does not play with the card. The game format used with each child is as follows:

> I am interested in learning how you feel about being in the hospital. I would like to play a game with you. I have some cards which we can play with if you are willing to play with me. (The cards are shown to the child.) Are you willing to play with me? Also, I have this tape recorder which I want you to turn on while we are playing, is that all right with you? Here are the cards which we can play with while we think about being in the hospital. Choose any card which you want to tell me about. What do you think of when you see the card? (The child responds.)

The child selects another card, and the same format is followed. If the child does not select all the cards, the investigator asks him if he wants to play with the remaining cards. If the child does not, the omissions are noted.

Next, the child is asked to answer these four questions: "What do you like about being in the hospital? What don't you like about being in the hospital? What has bothered you the most about being in the hospital? Who have you missed since being in the hospital?" The child's responses are tallied as "stressful," "nonstressful," or "no response."

Development:

Rationale: The underlying framework for the game and question format is based upon the methodology of projective instruments and of interviewing.

The choice of the subject for investigation is based on the fact that illness is considered to be a universal stress in childhood, that hospitalization ranks high among the stressful experiences which modify and interfere with the child's development (Belmont, 1970), and that this knowledge can be used to assist the child and his parents in dealing with the hospitalization, if the stressful stimuli in the hospital can be identified.

Source of Items: Items were developed from the author's professional experience with hospitalized children and her knowledge of child development, counseling, stress, and perception.

Procedure for Development: No information was provided other than that the instrument was pretested with a sample of 10 nonhospitalized children, aged 4 to 12 years.

Reliability and Validity: The reliability of the instrument has not been established.

The face validity of the game was established by having a group of five judges rate the stimuli as stressful or nonstressful for a hospitalized child. The judges were three doctoral students in counseling and child psychology and two registered nurses working on pediatric units.

The author found that children who were prepared for hospitalization and were in the hospital for fewer than 5 days perceived fewer stimuli as stressful than did children who were unprepared and who were hospitalized for a longer period of time.

Use in Research: The instrument was developed and used in the author's doctoral dissertation research referenced below. Menke's sample consisted of 104 Caucasian children.

Comments: The author lists words the children must have used to describe a stimulus if it is to be labeled "stressful." Some of the terms appear to be beyond the level of expressive vocabulary for children ages 4-12 years who were subjects in the author's study. However, the method merits further consideration and attention. As the game is now developed, it provides descriptive information. A scoring system could be developed which would provide quantifiable data.

The instrument is not included in this compilation.

References:

Belmont, Herman S. Hospitalization and its effect upon the total child. *Clinical Pediatrics*, August, 1970, *9*, 472.

Menke, E. M. *Factors related to children's perception of stress in the hospital.* Unpublished doctoral dissertation, Ohio State University, 1972.

______. Factors related to children's perception of stress in the hospital. Paper presented at the Ninth Nursing Research Conference, American Nurses' Association, 1973.

Source of Information:

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Instrument Copyright: Edna M. Menke, R.N., Ph.D.

Title: HOSPITAL STRESS RATING SCALE

Author: Volicer, Beverly J., and Bohannon, Mary W.

Variable: The psychosocial stress of events experienced by short-term hospital patients is the variable under study. Though the word stress, per se, is not defined, it is operationalized by 49 events/situations.

Description:

Nature and Content: This is a 49-item scale for measuring psychosocial stress experienced by short-term medical and surgical patients. Its purpose is to quantify the stressful hospital experiences of a patient.

The instrument consists of a set of forty-nine 3"x5" cards, each containing one stressful event. The events represent occurrences which might engender various degrees of stress, such as "thinking you might have cancer," "being hospitalized far away from home," "not having your light call answered," etc.

Administration and Scoring: The scale can be administered to any patient willing to, and capable of, completing the task. Patients who are not physically capable of manipulating the cards can direct the interviewer as to how the cards should be sorted; interviewers can read the cards to patients who do not see well enough to read them for themselves.

A patient is presented with the cards and asked to select those cards which represent stresses experienced since coming to the hospital. As an alternative to using cards, patients can be presented with a list and asked to check off the event experienced. The objective of either procedure is to have each patient select the cards which list events he(she) has experienced since hospitalization.

Rank order and mean rank scores have been assigned to each of the 49 events based upon a study of 261 medical-surgical patients. Examples of the most stressful and least stressful events and their mean rank scores are:

Rank Order		Mean Rank
49	Thinking you might lose your sight	40.6
1	Having strangers sleep in the same room with you	13.9

The stress score for each patient is calculated as the sum of the mean ranks for the events experienced.

Development:

Rationale: The underlying theoretical rationale is the work of Janis (1958) and Selye (1965) on stress.

Source of Items: A review of the literature and interviews with patients, lay persons, nurses, and physicians about their experiences with stress related to hospitalization, as well as the author's professional experiences, provided an initial list of 45 events.

Procedure for Development: In developing a method for quantifying stress, the authors began with the work of Holmes and Rahe (1967) and their Social Readjustment Rating Scale (SRRS). The SRRS provided a methodology for construction of this instrument. (It can also be used as a baseline measure of life stress for use with patients at the time they enter the hospital.)

Having compiled the original 45-event list, the authors revised it so that items "general" in nature were replaced by more specific ones or were expanded into several more explicit events. All items were then reviewed against a set of four criteria for exclusion/inclusion; to be retained, an event had to meet at least three of the four criteria. A list of 77 events resulted.

A pretest with 56 hospital patients resulted in the final 49-event list. (A detailed description of the development procedure can be found in the Volicer (1973, 1974), and Volicer and Bohannon (1975) articles referenced below.)

Reliability and Validity: Reliability of rank scores for different subgroups of the Volicer and Bohannon study ranged from 0.90 to 0.96 for all items on the scale. Test-retest reliability was estimated at 0.90 for a sample of 50 medical and surgical patients interviewed 2 days apart, and there was no tendency for scores to increase or decrease.

The procedure for development of the scale established its content validity.

Use in Research: Three articles concerned with the development of this instrument have been published in *Nursing Research*, and a fourth article has been accepted for publication by the same periodical. The first two articles (Volicer, 1973, and 1974) describe the design and development of the initial scale as well as the pilot studies. The 1975 article summarizes the history of the development of the scale and reports the data for the final form of the scale based on interviews with 261 patients. The in-press article "describes the use of the instrument with a large sample of patients" (Volicer, personal communication, 1976).

Comments: The sound, methodological approach which has been used in the development of this instrument is impressive. Volicer and Bohannon (1975) report that it is continuing to undergo evaluation and refinement, that some factor analysis has been completed, and that they plan to establish subscales which will represent different components of stress. It is hoped that development of this type of measure via sound methodological steps will continue, since this scale is an example of an instrument which focuses intensely on one significant aspect of hospitalization.

References:

Holmes, Thomas, and Rahe, Richard. The social readjustment rating scale. *Journal of Psychosomatic Research*, 1967, *11*, 213–218.

Janis, I. J. *Psychological stress.* New York: Wiley and Sons Publishing Company, 1958.

Seyle, Hans. The stress syndrome. *The American Journal of Nursing*, 1965, *65*, 97–99.

Volicer, Beverly J. Perceived stress levels of events associated with the experience of hospitalization: Development and testing of a measurement tool. *Nursing Research*, 1973, *22* (6), 491–497.

______. Patients' perceptions of stressful events associated with hospitalization. *Nursing Research*, 1974, *23* (3), 235–238.

Volicer, Beverly J., and Bohannon, Mary W. A hospital rating scale. *Nursing Research*, 1975, *24* (5), 352–359.

Volicer, Beverly J., and Burns, Mary. Preexisting correlates of hospital stress. *Nursing Research* (in press).

Source of Information:

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Instrument Copyright:

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Volicer, Beverly J., and Bohannon, Mary W.

HOSPITAL STRESS RATING SCALE

Assigned Rank	Event	Stress Value
1	Having strangers sleep in the same room with you	13.9
2	Having to eat at different times than you usually do	15.4
3	Having to sleep in a strange bed	15.9
4	Having to wear a hospital gown	16.0
5	Having strange machines around	16.8
6	Being awakened in the night by the nurse	16.9
7	Having to be assisted with bathing	17.0
8	Not being able to get newspapers, radio, or TV when you want them	17.7
9	Having a roommate who has too many visitors	18.1
10	Having to stay in bed or the same room all day	19.1
11	Being aware of unusual smells around you	19.4
12	Having a roommate who is seriously ill or cannot talk with you	21.2
13	Having to be assisted with a bedpan	21.5
14	Having a roommate who is unfriendly	21.6
15	Not having friends visit you	21.7
16	Being in a room that is too cold or too hot	21.7
17	Thinking your appearance might be changed after your hospitalization	22.1
18	Being in the hospital during holidays or special family occasions	22.3
19	Thinking you might have pain because of surgery or test procedures	22.4
20	Worrying about your spouse being away from you	22.7
21	Having to eat cold or tasteless food	23.2
22	Not being able to call family or friends on the phone	23.3
23	Being cared for by an unfamiliar doctor	23.4
24	Being put in the hospital because of an accident	23.6
25	Not knowing when to expect things will be done to you	24.2
26	Having the staff be in too much of a hurry	24.5
27	Thinking about losing income because of your illness	25.9
28	Having medications cause you discomfort	26.0
29	Having nurses or doctors talk too fast or use words you can't understand	26.4

Assigned Rank	Event	Stress Value
30	Feeling you are getting dependent on medications	26.4
31	Not having family visit you	26.5
32	Knowing you have to have an operation	26.9
33	Being hospitalized far away from home	27.1
34	Having a sudden hospitalization you weren't planning to have	27.2
35	Not having your call light answered	27.3
36	Not having enough insurance to pay for your hospitalization	27.4
37	Not having your questions answered by the staff	27.6
38	Missing your spouse	28.4
39	Being fed through tubes	29.2
40	Not getting relief from pain medications	31.2
41	Not knowing the results or reasons for your treatments	31.9
42	Not getting pain medication when you need it	32.4
43	Not knowing for sure what illness you have	34.0
44	Not being told what your diagnosis is	34.1
45	Thinking you might lose your hearing	34.5
46	Knowing you have a serious illness	34.6
47	Thinking you might lose a kidney or some other organ	35.6
48	Thinking you might have cancer	39.2
49	Thinking you might lose your sight	40.6

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Title: PATIENT RECOVERY INVENTORY

Authors: Wolfer, John A., Eisler, Jeanne, and Diers, Donna

Variable: The instrument was designed to elicit a patient's evaluation of his(her) physical condition while recovering from elective surgery.

Description:

Nature and Content: This is a 15-item, self-report rating scale. It includes 10 items, such as appetite, stomach condition today (i.e., upset, nauseated, vomiting), your nursing care, etc. The patient is asked to rate each item on a 6-point response scale—very poor, poor, fair, good, very good, or excellent.

Administration and Scoring: The instrument is to be completed by postsurgical patients for a series of days and should be completed at the same time each day. Approximately 7 minutes are required for completion of the instrument. Responses to 10 of the 6-point response scales are coded from 1 to 6 such that 1 is assigned a response of "very poor" and 6 a response of "excellent." No information is provided regarding the assignment of a numerical code to the responses to the remaining questions, or with respect to how the responses to the total set of questions are to be combined into a single score. However, the authors did state, "The individual ratings are summed for a total score which indicates the patient's overall physical state on a given day" (Eisler et al., 1972).

Development:

Rationale: The instrument is based on a holistic view of man and the psychosomatic approach to illness which holds that the process of physical recovery is influenced by the patient's psychosocial status.

Source of Items: This inventory is a slightly revised version of the Recovery Inventory developed by Wolfer and Davis (1970).

Procedure for Development: No information was provided.

Reliability and Validity: No information on the reliability of the instrument was provided.

Pearson correlations were computed between the total score derived from this instrument, the Social Desirability Score, and the nurses' ratings for each day patients were in the hospital. The correlations between the Patient Recovery Inventory and the Social Desirability Score for approximately 50 patients ranged from −0.06 to −0.32. The correlations between the nurses' ratings of physical assessment and the Patient Recovery Inventory score ranged from 0.67 to 0.69.

Use in Research: Eisler et al. (1972) used this instrument, along with the Crowne and Marlowe (1964) Social Desirability Scale and the Patient Welfare Inventory, in a study which included 64 adult surgical patients.

Comments: This instrument is in the very early stages of psychometric development, and, before its potential usefulness can be fairly assessed, its reliability and validity must be established.

References:

Crowne, D. P., and Marlowe, D. *Approval motive: Studies in evaluative dependence.* New York: John Wiley and Sons, 1964.

Eisler, Jeanne, Wolfer, John A., and Diers, Donna. Relationship between need for social approval and postoperative recovery and welfare. *Nursing Research*, 1972, *21*, 520–525.

Wolfer, John A. Definition and assessment of surgical patients' welfare and recovery. *Nursing Research*, 1973, *22*, 394–401.

Wolfer, John A., and Davis, Carol E. Assessment of surgical patients' preoperative emotional condition and postoperative recovery. *Nursing Research*, 1970, *19*, 402–414.

Source of Information:

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Instrument Copyright: None.

Wolfer, John A., Eisler, Jeanne, and Diers, Donna

PATIENT RECOVERY INVENTORY

Day__________

The purpose of this form is to get your evaluation of your condition at different times following your operation. How you feel regarding such things as appetite, strength, pain, etc. will, of course, change from time to time and not always for the best. Also, you may feel very good about some aspects of your condition and very poor about other aspects. It is important for us to know this, so please try and be as frank as possible. No one but the project nurse will see your ratings.

We would appreciate any suggestions you might have regarding this form.

Please fill out this form at ________________.

Make your ratings simply by checking the box that best represents how you feel. These ratings are to cover the period from your afternoon meal until now. Make your ratings in comparison to how you usually feel at home when you are well.

	Very Poor	Poor	Fair	Good	Very Good	Excellent
Appetite						
Strength and energy						
Stomach condition today (i.e., upset, nauseated, vomiting)						
Bowel condition (i.e., gas pains)						
Ability to urinate						
Ability to do things for yourself						
Ability to move around						
Interest in what is going on around you						
Your nursing care						
Your medical care						

	None	Very Little	Some	Quite A Bit	Much	Very Much
How **much** pain have you had today?						

	Very Mild	Mild	Moderate	Intense	Very Intense	Extremely Intense
How **intense** has the pain been?						

If anything unusual or upsetting happened today, either in or out of the hospital, please indicate how upsetting it was to you:

Not At All	A Little	Moderately	Quite A Bit	Very Much	Extremely

How many times have you been out of bed today? ☐

This afternoon, about what per cent of the time have you spent out of bed moving around?

0%	25%	50%	75%	100%
☐	☐	☐	☐	☐

Comments:

Titles: ANXIETY STATUS INVENTORY (ASI) and SELF-RATING ANXIETY SCALE (SAS). **Note:** These two instruments were developed to be used jointly.

Author: Zung, William W. K.

Variable: The variable measured is anxiety conceived specifically as a clinical disorder. Anxiety as a disorder is defined in the Diagnostic and Statistical Manual of Mental Disorders (second edition) as a neurosis characterized by anxious overconcern, extending to panic, and frequently associated with somatic symptoms (Zung, 1974).

Description:

Nature and Content: ASI: In using the Anxiety Status Inventory an interviewer asks the patient 20 questions. These questions cover 20 diagnostic criteria (5 affective and 15 somatic symptoms) of anxiety disorder. The diagnostic criteria are (1) anxiousness; (2) fear; (3) panic; (4) mental disintegration; (5) apprehension; (6) tremors; (7) body aches and pains; (8) easy fatigability, weakness; (9) restlessness; (10) palpitation; (11) dizziness; (12) faintness; (13) dyspnea; (14) paresthesia; (15) nausea and vomiting; (16) urinary frequency; (17) sweating; (18) face flushing; (19) insomnia; (20) nightmares. As an example, question number 1, for "anxiousness" is: "Do you ever feel nervous and anxious?" The interviewer evaluates the subject's responses either as observed or as reported. The responses are then scored on a 4-point scale in terms of severity.

SAS: The Self-Rating Anxiety Scale is based upon the same 20 diagnostic criteria as the clinician-rated Anxiety Status Inventory. Each item in the SAS parallels the item of the same number in the ASI. For example, item number 1 of the SAS is: "I feel more nervous and anxious than usual." Responses to the SAS are rated on a 4-point scale.

Administration and Scoring: ASI: The ASI is designed as a rating scale to be used by a clinician. The data upon which judgments are based come from an interview with the patient. The items are to be quantified, using all information available to the rater; this includes clinical observations and material reported by the patient. Use of the Interview Guide assures coverage of all areas in which ratings must be made. In rating the patient's current status, an arbitrary period of 1 week prior to the evaluation is adopted in order to standardize the data. Degrees of severity of anxiety are scored as follows: none = 1, mild = 2, moderate = 3, severe = 4.

An index score is derived by dividing the patient's total sum of scores on the 20 items by the maximum possible score of 80, and multiplying the resulting decimal fraction by 100. The interpretation of the scores is the same as that for the self-rated anxiety scale scoring described below.

The estimated length of time required for the interview is usually less than 10 minutes.

SAS: In using this scale, the patient is asked to rate each of the 20 items as to how it has applied to him(her) within the past week, choosing from four response alternatives. The alternatives are: None or a little of the time, Some of the time, Good part of the time, Most or all of the time.

In scoring the items of this scale, a value of 1, 2, 3, or 4 is assigned to a response indicating presence of anxiety. The scale is constructed so that the less anxious patient will have a low score and the more anxious patient will have a higher score.

An index score for the SAS is derived by the same procedure as that described above for the ASI. An index score of 45 on the SAS is the morbidity cut-off point for distinguishing normal patients from patients with anxiety disorder.

Estimated time for completion of the scale is less than 5 minutes.

Development:

Rationale: There are numerous rating scales available and in use for assessing anxiety as an affect, a symptom, or a disorder. In the words of the author,

> The need for a standardized method of evaluating and recording the presence of anxiety as a clinical disorder has not been met by most scales today. We were interested in having a rating instrument which would fulfill the following: it should be inclusive with respect to symptoms of anxiety as a psychiatric disorder; it should quantitate the symptoms; it should be short and simple; and it should be available in two formats so that (1) the patient can indicate his own responses on a self-administered scale (SAS) and (2) the observer can indicate his clinical evaluation of the patient's status on the same set of criteria (ASI) (Zung, .974).

Source of Items: Items for both the ASI and SAS were taken from the most commonly found characteristics of anxiety disorder described in the psychiatric literature.

Procedure for Development: In a study whose main purpose was to construct standardized instruments for measuring anxiety as a clinical disorder, the author administered the two scales to several samples of normal subjects and subjects with various psychiatric diagnoses.

A total of 225 patients (152 inpatients and 73 outpatients) were tested at Duke University Medical Center and the Veterans' Administration Hospital, Durham, North Carolina. The inpatients were all men, whose ages ranged from 22 to 75 years with a mean age of 45 years. The outpatient population was made up of 23 men and 50 women, whose ages ranged from 14 to 72 years with a mean age of 32 years. The mean age for all 225 subjects was 41 years.

Reliability and Validity: Reliability figures were not provided for either scale.

Concurrent validity was obtained with the Taylor Manifest Anxiety Scale (TMAS) drawn from the MMPI. Correlations between the ASI and TMAS, and the SAS and TMAS were 0.33 and 0.30, respectively.

For both the ASI and SAS, statistical tests of significance using analysis of variance indicated that the mean index scores obtained by patients with the diagnosis of anxiety disorder were significantly higher ($p < 0.05$) than the mean scores of patients with other psychiatric diagnoses. All age-matched normal subjects ($n = 96$) between the ages of 20 and 64 years scored below the SAS index score of 45. Using the morbidity cut-off score of 45, there were less than 5 percent false positives.

Use in Research: For studies in which these instruments have been used, the reader is referred to the author's references cited below.

Comments: The Interview Guide for items in the ASI is clear and should be helpful for the clinician who is observing the patient for symptoms of anxiety. The items of the SAS are worded in simple terms which should present no difficulty to a subject. Both of the instruments are clear and straightforward in administration and should be useful in assessing clinical anxiety. However, psychometric work needs to be done to provide evidence of reliability and additional validity evidence.

References:

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______. The measurement of affects: Depression and anxiety. In P. Pinchot (Ed.), *Psychological measurements in psychopharmacology* (Modern Problems in Pharmacopsychiatry Series, Vol. 7). Paris: Karger, 1974.

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Zung, William K.

THE ANXIETY STATUS INVENTORY

Affective and somatic symptoms of anxiety	Interview guide for anxiety status inventory (ASI)	Severity of observed or reported responses			
		none	mild	mod	sev
1. Anxiousness	Do you ever feel nervous and anxious?	1	2	3	4
2. Fear	Have you ever felt afraid?	1	2	3	4
3. Panic	How easily do you get upset? Ever have panic spells or feel like it?	1	2	3	4
4. Mental disintegration	Do you ever feel like you're falling apart? Going to pieces?	1	2	3	4
5. Apprehension	Have you ever felt uneasy? or that something terrible was going to happen?	1	2	3	4
6. Tremors	Have you ever had times when you felt yourself trembling? shaking?	1	2	3	4
7. Body aches and pains	Do you have headaches? neck or back pains?	1	2	3	4
8. Easy fatigability, weakness	How easily do you get tired? Ever have spells of weakness?	1	2	3	4
9. Restlessness	Do you find yourself restless and can't sit still?	1	2	3	4
10. Palpitation	Have you ever felt that your heart was running away?	1	2	3	4
11. Dizziness	Do you have dizzy spells?	1	2	3	4
12. Faintness	Do you have fainting spells? or feel like it?	1	2	3	4
13. Dyspnea	Ever have trouble with your breathing?	1	2	3	4
14. Paresthesias	Ever have feelings of numbness and tingling in your fingertips? or around your mouth?	1	2	3	4
15. Nausea and vomiting	Do you ever feel sick to your stomach or feel like vomiting?	1	2	3	4
16. Urinary frequency	How often do you need to empty your bladder?	1	2	3	4
17. Sweating	Do you ever get wet, clammy hands?	1	2	3	4
18. Face flushing	Do you ever feel your face getting hot and blushing?	1	2	3	4
19. Insomnia, init.	How have you been sleeping?	1	2	3	4
20. Nightmares	Do you have dreams that scare you?	1	2	3	4

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Zung, William K.

THE SELF-RATING ANXIETY SCALE (SAS)

Name
No.
Age
Date
Sex: M F

	None or a little of the time	Some of the time	Good part of the time	Most or all of the time
1. I feel more nervous and anxious than usual				
2. I feel afraid for no reason at all				
3. I get upset easily or feel panicky				
4. I feel like I'm falling apart and going to pieces				
5. I feel that everything is all right and nothing bad will happen				
6. My arms and legs shake and tremble				
7. I am bothered by headaches, neck and back pains				
8. I feel weak and get tired easily				
9. I feel calm and can sit still easily				
10. I can feel my heart beating fast				
11. I am bothered by dizzy spells				
12. I have fainting spells or feel like it				
13. I can breathe in and out easily				
14. I get feelings of numbness and tingling in my fingers, toes				
15. I am bothered by stomach aches or indigestion				
16. I have to empty my bladder often				
17. My hands are usually dry and warm				
18. My face gets hot and blushes				
19. I fall asleep easily and get a good night's rest				
20. I have nightmares				

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Title: DEPRESSION STATUS INVENTORY (DSI) and SELF-RATING DEPRESSION SCALE (SDS) **Note:** These two instruments were developed to be used jointly.

Author: Zung, William W. K.

Variable: The variable measured is depression. Depression as an affect or feeling tone is a ubiquitous and universal condition which, as a human experience, extends on a continuum from normal mood swings to a pathological state (Zung, 1974).

Description:

Nature and Content: DSI: The Depression Status Inventory is a 20-item, semi-structured, interviewer-rated depression instrument. The scale addresses itself to the most commonly found characteristics of depression divided into the following categories: pervasive affective disturbances (two items), physiological disturbances (eight items), psychomotor disturbances (two items), and psychological disturbances (eight items). The Interview Guide contains 20 questions based upon clinical signs and symptoms of depression. For example, question 1 states, "Do you ever feel sad or depressed?" Each of the items is judged on a 4-point scale of severity of observed or reported responses. These are defined as follows:

1 = none or insignificant in intensity or duration, present none or a little of the time in frequency.
2 = mild in intensity or duration, present some of the time.
3 = of moderate severity, present a good part of the time.
4 = severe in intensity or duration, present most or all of the time in frequency.

SDS: The Self-Rating Depression Scale is a 20-item, self-rating instrument which addresses itself to the same categories as the Depression Status Inventory. A typical item is item 1, which reads, "I feel down-hearted, blue, and sad." Responses are given on a 4-point scale using four quantitative terms:

1 = none or little of the time.
2 = some of the time.
3 = good part of the time.
4 = most or all of the time.

A value of 1, 2, 3, or 4 is assigned to a response depending upon whether the item is worded positively or negatively.

Administration and Scoring: DSI: The author provides the following information: "The data upon which the judgments are based come from the interview with the patient. The items in the scale are to be quantified by using all the information available to the rater. This includes both clinical observation and the material reported by the patient.

Use of the Interview Guide assures coverage of all the areas on which judgments are required. However, the rater has the flexibility of modifying the questions or probing for details, which makes possible a smooth interview that does not sound like a question-answer examination. In rating the patient's current status, an arbitrary period of 1 week prior to the evaluation is adopted in order to standardize the data. In order to reinforce this, the interviewer should occasionally precede questions with, "During the past week, have you . . . ?"

The following rules and guidelines were used in rating the patient's psychopathology: Each item should be rated independently as a unit in order to eliminate the "halo" effect. Each score should be the average of the full range of responses observed or elicited, and not necessarily the extreme in severity. To help establish severity, the following questions may be necessary: Intensity: "How bad was it?" Duration: "How long did it last?" and Frequency: "How much of the time did you feel that way?"

An item is scored positive and present when (1) behavior is observed, (2) behavior was described by a patient as having occurred, and (3) patient admits that symptom is still a problem.

An item is scored negative and not present when (1) symptom has not occurred and is not a problem or is not present, (2) response is ambiguous even after suitable probing, and (3) patient gives no information relevant to an item.

Ratings of the individual items are recorded on a standard form that has the Checklist of Signs and Symptoms of Depression, Interview Guide, and ratings for the severity of observed or reported responses (Zung, 1972c).

The total raw score from the DSI is converted to an index by dividing the sum of the raw scores obtained on the 20 items by the maximum possible score of 80, and multiplying the resulting decimal fraction by 100. (Zung, 1972c, 1974).

SDS: In using the SDS, the subject is asked to rate each of the 20 items as to how it applies to him at the time of testing in four quantitative terms. A key for scoring this scale is provided (Zung, 1965).

According to Buros (1972), the original Self-Rating Depression Scale booklet entitled, "The Measurement of Depression" (copyrighted 1967) presents directions, keys, norms, and 12 copies of the scale. A 22-minute, 16 mm sound and color film on use of the scale is available. In addition to English, editions of the scale are also available in the Chinese, Czech, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Lugana, Marathi, Norwegian, Persian, Polish, Romanian, Slovak, Spanish, Swedish, Thai, Turkish, Vietnamese, Yiddish, and Yugoslavak languages.

An index for the SDS is derived in the same manner as that for the DSI described above. Patients with SDS indices of 49 or less are considered normal, those with indices between 50–59 are considered to have mild or moderate depression, those with indices of 60–69 are considered to have moderate to severe depression, those with indices of 70 or more are considered to have severe depression (Zung, 1974).

Development:

Rationale: Zung stated, "The fact that there is a need for assessing depression, whether as an affect, a symptom, or a disorder is obvious by the numerous scales and inventories available and in use today. The need to assess depression simply and specifically as a psychiatric disorder has not been met by most scales available today" (1965).

Zung and his associates were interested in having a scale for assessing depression in patients whose primary diagnosis was a depressive disorder which would fulfill the following: it should be all inclusive with respect to symptoms of the illness; it should be short and simple; it should quantitate rather than qualitate; and it should be self-administered and indicate the patient's own response at the time the scale is given (Zung, 1965).

The DSI was designed to obtain a clinical rating of depression in conjunction with the patient's self-rating on the SDS. The DSI was designed so that it would correspond to the SDS with respect to the diagnostic criteria measured. It would also provide a standardized method for recording the patient's clinical status and would have responses that could be recorded in a quantitative manner.

Source of Items: The 20 items of the DSI and SDS are drawn from a large pool of signs and symptoms of depression. The pool was assembled from the work of R. R. Grinker, J. E. Overall, A. S. Friedman, and their associates; however, the items were not designed to represent any one theory of depression.

Procedure for Development: DSI: The procedure for developing the DSI included the following steps: (1) deciding what was to be measured in terms of explicitly defined units, (2) observing behavior and eliciting information to complete the DSI, (3) making and recording judgments quantitatively, and (4) obtaining patient data on both interviewer-rated and self-rated depression scales. Data were collected and analyzed for the interpretation of scores and for the differentiation among five diagnostic groups of psychiatric disorders (Zung, 1972a).

In developing the DSI as an adjunct to the SDS, a total of 225 patients were tested—152 inpatients and 73 outpatients (Zung, 1972c).

SDS: Ten of the 20 items in the SDS were worded symptomatically positive and 10 symptomatically negative in order to avoid subject response set. Because the original version of the SDS (1965) caused some problems in administering and scoring, the author revised the scale by rewording some items and some response alternatives.

In developing the original SDS, Zung (1965) administered the scale to 56 patients who had admitting diagnoses of depressive disorders and a normal control group of 100 individuals.

Reliability and Validity: DSI: The split-half (odd-even) reliability of the DSI was 0.81 ($p < 0.01$) on a sample of 225 patients (Zung, 1972c).

The discriminant power of the DSI was demonstrated when it differentiated significantly ($p < 0.01$) depressed patients (DSI mean score = 61) from nondepressed patients (DSI mean score: 48 for schizophrenia, 51 for anxiety disorder, 52 for personality disorders, and 44 for transient situational disturbances). There were 96 patients in the sample of depressive disorders; the other diagnostic groups contained 25, 22, 54, and 12 subjects respectively.

SDS: The split-half (odd-even) reliability coefficient of the revised SDS was found to be 0.73 ($p < 0.01$). The sample consisted of 225 patients: 152 inpatients and 73 outpatients.

Concurrent validity for the original (1965) scale was measured by correlation with the MMPI. As expected, the highest coefficient was obtained between the SDS and MMPI Depression Subscale: an r of 0.70. The data analysis was based upon 152 patients (Zung, 1967).

Scores on the SDS and global ratings made by clinicians showed a significantly high correlation ($r = 0.53$) for depressed patients (Zung, 1974).

The SDS and the Hamilton Physician-Rating Depression Scale correlated significantly, $r = 0.79$ ($p < 0.01$) (Brown and Zung, 1972). The data for this analysis came from 35 patients tested before, during, and at the completion of a drug study, plus data from 30 subjects who were rejected for the drug study.

With regards to discriminatory power, the revised SDS shows good validity. Using the SDS index of 50 as the morbidity cut-off score, 88 percent of 360 patients were identified correctly as depressed patients and only 12 percent (n = 45) were misclassified as normal subjects. Using the same cut-off score of 50 for 1,108 normal subjects, only 12 percent of them were considered "depressed" and 88 percent were considered "not depressed" (Zung, 1972a). These subjects ranged in age from 20 to 64 years; the scale lost its discriminatory power when it was applied to subjects 19 years of age and under or subjects 65 years of age or older.

Some evidence of construct validity has been obtained from a cross-cultural study. SDS indices and suicide rates were found to be significantly related among normal adults from six countries. The rank order of the SDS indices of the countries are: Czechoslovakia, Sweden, Germany, Spain, England, and the United States; the rank order of death by suicide was: Czechoslovakia, Germany, Sweden, England, United States, and Spain (Zung, 1972b).

Use in Research: The author has used these instruments extensively in his research work. As one example, in a cross-cultural survey of depressive symptomatology in normal adults, the author employed the SDS as a criterion instrument to compare depressive symptomatology in Czeckoslovakia (n = 697), England (n = 364), Germany (n = 64), Spain (n = 597), Sweden (n = 82), and the United States (n = 364).

For information on additional studies, the reader should consult the references which follow.

Comments: It would seem advisable to obtain information on both the DSI and the SDS for each patient whenever possible. The two tools have had a good deal of psychometric attention.

The DSI has some evidence of reliability and validity. However, it requires interview skills and is more time consuming than the SDS. Nevertheless, the DSI has the advantage of slightly higher reliability than the SDS and can be administered to patients who are unable to read and write.

The SDS has several advantages as an instrument for assessing a patient's depression. The items are stated in simple terms which makes it easier for patients to understand and to respond; the scale is self-administered and this should save time; the index scores are easily interpreted. For additional information the reader should see Buros (1972).

References:

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Zung, William W. K., Richards, Carolyn B., and Short, Marvin J. Self-rating depression scale in an outpatient clinic. *Archives of General Psychiatry*, Dec. 1965 *13*, 508–515.

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Instrument Copyright: William W. K. Zung, M.D.

ZUNG, William, K.

THE DEPRESSION STATUS INVENTORY (DSI)

Signs & Symptoms of Depression	Interview Guide for Depression Status Inventory (DSI)	Severity of Observed or Reported Responses:			
		None	Mild	Mod	Sev
1. Depressed mood	Do you ever feel sad or depressed?	1	2	3	4
2. Crying spells	Do you have crying spells or feel like it?	1	2	3	4
3. Diurnal variation: symptoms worst in a.m.	Is there any part of the day when you feel worst? Best?	1	2	3	4
4. Sleep disturbance	How have you been sleeping?	1	2	3	4
5. Decreased appetite	How is your appetite?	1	2	3	4
6. Weight loss	Have you lost any weight?	1	2	3	4
7. Decreased libido	How about your interest in the opposite sex?	1	2	3	4
8. Constipation	Do you have trouble with constipation?	1	2	3	4
9. Tachycardia	Have you had times when your heart was beating faster than usual?	1	2	3	4
10. Fatigue	How easily do you get tired?	1	2	3	4
11. Psychomotor agitation	Do you find yourself restless and can't sit still?	1	2	3	4
12. Psychomotor retardation	Do you feel slowed down in doing the things you usually do?	1	2	3	4
13. Confusion	Do you ever feel confused and have trouble thinking?	1	2	3	4
14. Emptiness	Do you feel life is empty for you?	1	2	3	4
15. Hopelessness	How hopeful do you feel about the future?	1	2	3	4
16. Indecisiveness	How are you at making decisions?	1	2	3	4
17. Irritability	How easily do you get irritated?	1	2	3	4
18. Dissatisfaction	Do you still enjoy the things you used to?	1	2	3	4
19. Personal devaluation	Do you ever feel useless and not wanted?	1	2	3	4
20. Suicidal ruminations	Have you had thoughts about doing away with yourself?	1	2	3	4

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Zung, William K.

SELF-RATING DEPRESSION SCALE (SDS)

	A Little of the Time	Some of the Time	Good Part of the Time	Most of the Time
1. I feel down-hearted and blue				
2. Morning is when I feel the best				
3. I have crying spells or feel like it				
4. I have trouble sleeping at night				
5. I eat as much as I used to				
6. I still enjoy sex				
7. I notice that I am losing weight				
8. I have trouble with constipation				
9. My heart beats faster than usual				
10. I get tired for no reason				
11. My mind is as clear as it used to be				
12. I find it easy to do the things I used to				
13. I am restless and can't keep still				
14. I feel hopeful about the future				
15. I am more irritable than usual				
16. I find it easy to make decisions				
17. I feel that I am useful and needed				
18. My life is pretty full				
19. I feel that others would be better off if I were dead				
20. I still enjoy the things I used to do				

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Client Affective Variables: Self-Concept

Title: ADAPTATION OF CLARK AND CLARK DOLL TEST and BOGARDUS SOCIAL DISTANCE SCALE

Authors: Anderson, Frances J., and Hamm, N.

Variable: The variable is racial self-concept as measured by peer preference; it is operationalized for this instrument as "how the Indian and/or Caucasian child perceives himself(herself) as related to the race of preferred peers" (Anderson and Hamm, 1973).

Description:

Nature and Content: This 20-item interview instrument is made up of 16 questions posed in the form of a doll-choosing game, and 4 sociogram questions which deal with peer relations in the classroom. The first 13 questions are stated in a positive manner, e.g., "Which doll would you like to play with?" "Which doll would you want to sit by you in school?" These same questions are, then, repeated with negative words, e.g., "Which doll would you not want to play with?" "Which doll would you not want to sit by you in school?" Three additional questions relating to identification were: "Which doll looks like a white doll?" "Which doll looks like an Indian doll?" "Which doll looks like you?" These questions are asked with respect to the four dolls previously placed before the subject (female and male Indian dolls, female and male Caucasian dolls—all identically dressed).

The four sociogram questions refer to peer relations in classroom, e.g., "Who are the four children in your classroom who are your best friends?"

Administration and Scoring: Four dolls identical in form, feature, and dress but differing in skin pigment, eye color, hair color, and hair texture are to be placed on a table before the subject. The instrument should be administered by an investigator able to relate well with young children (3 to 8 years of age) and in a quiet room where distractions are at a minimum.

For questions 1 through 13, when a child chooses a doll of his(her) own race, that choice is scored with a 1. When a child chooses a doll of the other race, that choice is scored with a 0. For questions 14, 15, and 16, responses are recorded 1 or 0 as to correctness on race and sex.

Development:

Rationale: From the work of Clark and Clark (1947) and other investigators, it has been accepted by many that negative attitudes toward members of a minority race may be evidenced by age 5 and that by that age, the child has also learned the positive and negative values and stereotyped roles associated with color differences. Gregor and McPherson (1966) reported that both black and white children between 6 and 7 years of age identified themselves with their own race and exhibited preferences for their own ethnic traits.

Source of Items: The Clark and Clark Doll Test and the Bogardus Social Distance Scale were the sources for the items.

Procedure for Development: No information was provided.

Reliability and Validity: No reliability or validity data are reported for this instrument. However, such data are available for the Clark and Clark Doll Test. A nonsignificant relationship was found between Doll Test Scores and sociometric measures of peer relations.

Use in Research: Anderson and Hamm (1973) used the instrument in their study "The Racial Self-Concept of Indian and Caucasian Children in an Integrated School." Their sample consisted of 20 Indian children who were first, second, and third graders in an integrated public school in a midwestern State.

Comments: The authors encountered no difficulty in using this instrument with school-age children. Anyone contemplating using it with younger children might wish to restructure some of the items to make them more relevant to a younger child's life and experiences.

Use of real dolls does help the children to conceptualize situations where they are asked to express a choice and should facilitate administration of the instrument.

References:

Anderson (Ayres), Frances J, and Hamm N. *The racial self-concept of Indian and Caucasian children in an integrated school.* Paper presented at meeting of Society for Research in Child Development, 1973.

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Gregor, A. J., and McPherson, D. A. Racial attitudes among white and Negro children in a deep-south standard metropolitan area. *Journal of Social Psychology*, 1966, *68*, 95–106.

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Instrument Copyright: None.

Anderson, Frances J., and Hamm N.

ADAPTATION OF CLARK AND CLARK DOLL TEST AND BOGARDUS SOCIAL DISTANCE SCALE

I am going to ask you some questions about these dolls standing in front of you. I want you to play the doll-choosing game by pointing to one of the dolls in response to the questions. Later, I will ask you some questions about other things not concerned with the dolls. I have a list of questions here and I'll be writing your score to see how you do on the game.

1. Which one of these dolls is most like the one you have at home?
2. Which doll would you like to play with? (Which doll would you not want to play with?)
3. Which doll is a nice doll? (Which doll is a bad doll?)
4. Which doll do you like the best? (Which doll do you not like?)
5. Which doll has a nice color? (Which doll does not have a nice color?)
6. Which doll would you invite to your birthday party? (Which doll would you not invite to your birthday party?)
7. Which doll would you want to walk home from school with? (Which doll would you not want to walk home from school with?)
8. Which doll would you like to have for a sister or brother? (Which doll would you not like to have for a sister or brother?)
9. Which doll would you like to have for a best friend? (Which doll would you not like to have for a best friend?)
10. Which doll would you want to sit by you in school? (Which doll would you not want to sit by you in school?)
11. Which doll would you want to live in a house near you? (Which doll would you not want to live in a house near you?)
12. Which doll would you want to see and talk to real often? (Which doll would you not want to see and talk to very often?)
13. Which doll would you want to have living in America? (Which doll would you not want to have living in America?)
14. Which doll looks like a white doll?

15. Which doll looks like an Indian doll?

16. Which doll looks most like you?

The rest of the questions don't involve choosing a doll. I just want you to answer each of these questions.

17. Who are the four children in your classroom that are your best friends?

18. Who are the four children in your classroom that you would like to work with on a special class project?

19. Who are the four children in your classroom that you would like to sit next to?

20. If you could have a birthday party, which four children in your classroom would you invite?

Title: POSTMYOCARDIAL INFARCTION PATIENT SEMANTIC DIFFERENTIAL SCALES

Author: Avillo, Linda J.

Variable: The self-concept of postmyocardial infarction patients is the variable under study. Self-concept is operationally defined as "how one feels about himself (herself) at a particular point in time" (Avillo, 1971).

Description:

Nature and Content: This interview instrument is set up like a semantic differential scale after the method of Osgood (1967) but is treated as an interval scale with 12 pairs of adjectives. Twelve "negative" adjectives are listed on the left side of the scale and 12 "positive" adjectives are listed on the right side of the scale. Each set of "negative" and "positive" adjectives is connected by a 7-point continuun on which the respondent is to indicate the point (1, 2, 3, 4, 5, 6, or 7) which best described his(her) feelings about self at a particular point in time. (See instrument below.) If the patient thinks he is very changeable, he places a check in space 1; if changeable, a check in space 2; if slightly changeable, a check in space 3; if neutral, a check in space 4; if slightly stable, a check in space 5; if stable, a check in space 6; if very stable, a check in space 7.

Administration and Scoring: The scales were designed to be orally administered by an investigator in a hospital setting after a patient had been transferred from a coronary care unit to a general medical unit and after the attending physician had given permission for the subject to complete the instrument.

It is estimated that approximately 5 to 10 minutes is required for administering the scale after the directions have been explained to the respondent.

The responses are scored as a Likert-type scale with a point score assigned for each adjective pair that corresponds to the space marked on the continuum, e.g., space 1 = 1 point, space 7 = 7 points. A total score is computed for each subject; the range of total scores is from 7 to 84. A high total score is interpreted as indicating a more positive self-concept, a low total score as a more negative self-concept. No ranges for high or low scores were provided.

Development:

Rationale: The author indicated that the instrument was not derived from any specific theory.

Source of Items: The adjectives came from the author's classmates, from Roget's Thesaurus, a Webster's dictionary, and Osgood (1967).

Procedure for Development: The author asked classmates to list positive adjectives which related to themselves as family members and as members of a community. The adjectives listed most frequently were selected for inclusion in the scales; then, adjectives of opposite meanings were selected from the sources cited in the preceding section (Source of Items).

Reliability and Validity: The author stated that no work had been done establishing the reliability or validity of the instrument (Avillo, 1971).

Use in Research: Avillo (1971) developed and used the instrument along with the IPAT Anxiety Scale in a study of postcoronary patients. Her research design provided for using the Semantic Differential Scales for pretesting and posttesting a control group of postcoronary patients and an experimental group of postcoronary patients. The latter had been subject of a structured teaching unit on postcoronary care.

Comments: The instrument is still in the very early stages of development. No reliability and validity work has been done, and though the format appears to be that of a semantic differential, the structured scoring used by the author is, in effect, that for an interval scale. Anyone contemplating using this instrument should consult the Osgood reference cited below.

References:

Avillo, Linda J. *The effectiveness of a teaching approach on self-concept in post-myocardial infarction patients.* Unpublished master's thesis, University of Arizona, 1971.

Osgood, C. *The measurement of meaning.* Chicago: University of Illinois Press, 1967.

Source of Information:

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Instrument Copyright: None.

Avillo, Linda J.

POST MYOCARDIAL INFARCTION PATIENT SEMANTIC DIFFERENTIAL SCALES

Directions. In order to give better care to patients who have had a heart attack, I wish to find out how you feel about yourself at this time. I wish to do this by measuring what certain words mean to you. On this paper I have some adjectives. Each line of spaces has an adjective at either end. Place a check in the space in each line that most nearly applies to your feelings about yourself. For example, which adjective below best describes you, in your opinion, at this time?

Short	_1:_2:_3:_4:_5:_6:_7	Tall
	__:__:__:__:__:__:__	

SCORE VALUES: #1 Very short
#2 Short
#3 Slightly short
#4 Neutral
#5 Slightly tall
#6 Tall
#7 Very tall

If you think you are very tall, place a check in space #7. If you are just tall, place a check in space #6. The answers you will give only apply to how you feel at this very moment. You may feel differently tomorrow. There are no wrong answers.

	_1:_2:_3:_4:_5:_6:_7	
Changeable	__:__:__:__:__:__:__	Stable
Uncertain	__:__:__:__:__:__:__	Confident
Dejected	__:__:__:__:__:__:__	Happy
Detached	__:__:__:__:__:__:__	Involved
Confused	__:__:__:__:__:__:__	Organized
Inattentive	__:__:__:__:__:__:__	Concerned

Indifferent	__:__:__:__:__:__:__	Enthusiastic
Passive	__:__:__:__:__:__:__	Active
Uninterested	__:__:__:__:__:__:__	Interested
Lonely	__:__:__:__:__:__:__	Friendly
Uncomfortable	__:__:__:__:__:__:__	Comfortable
Nervous	__:__:__:__:__:__:__	Calm

Title: SICK ROLE ACCEPTANCE (MEASURE I)

Authors: Brown, Julia S., and Rawlinson, May E.

Variable: The individual's tendency to accept or reject the sick role is conceptualized as the extent to which he(she) perceives himself(herself) to resemble sick persons with regard to worthiness, power, activity, and independence. The variable is operationalized as the semantic distance between the two concepts of "myself" and "most persons who are sick."

Description:

Nature and Content: The instrument utilizes the semantic differential technique. Ten 7-point bipolar adjective scales are presented to the subject. These 10 scales tap 4 dimensions of meaning through the following adjective pairs: the evaluative factor (good/bad, fair/unfair, clean/dirty); the activity factor (fast/slow, hot/cold, sharp/dull); the potency factor (hard/soft, large/small, heavy/light); and independence factor (independent/dependent). The two concepts rated on these scales are "myself" and "most persons who are sick." (The former may be varied, as "myself since surgery," "myself before treatment," etc.)

Administration and Scoring: The instrument is self-administered, and instructions are attached to the instrument. In an interview situation, these instructions may be reviewed by the administrator to ensure comprehension of the task by the subject.

In scoring, first the subject's rating of "myself" on each adjectival scale is assigned a value from 1 to 7, with 7 representing the most favorable judgment, i.e., most worthwhile, most powerful, most active, most independent. These values for the 10 scales are then summed to arrive at a total which may vary from 10 to 70 points. Second, the subject's responses to the concept "most persons who are sick" (on the same 10 scales), are similarly summed to arrive at a total ranging from 10 to 70 points. This second sum is then subtracted from the first sum. The result constitutes the semantic difference between the two concepts and can vary from −60 to +60. This is the individual's *Sick Role Acceptance Score*. A positive score implies that the subject judges himself to be better, more independent, more powerful, and more active than sick persons; a negative score implies that the subject views himself as even less independent, less active, etc., than most sick persons.

Subscores may also be obtained for each of the four factors (Evaluative, Activity, Potency, Independence) by summing values assigned to the specific adjectives representing the specific factor, and determining the semantic distance on that factor across concepts.

Development:

Rationale: A review of the sick-role literature revealed that most investigators had focused on initial entry into the sick role and questioned subjects as to probable actions under hypothetical illness conditions. The authors desired a more general instrument, capable of measuring the extent to which the sick role was accepted by the individual during treatment or following treatment.

The literature indicated that certain qualities were commonly attributed to occupants of the sick status—namely, undesirability, dependency, passivity, and weakness. Since these attributes are quite similar to the evaluative, potency, and activity dimensions of meaning elicited by Osgood's semantic differential, the authors decided to measure the extent to which an individual viewed himself as sick by the semantic distance between the meanings of "self" and "sick person." Precedents for the measurement of social role concepts by use of the semantic differential are cited in the author's article referenced below.

Source of Items: See "Procedure for Development."

Procedure for Development: The adjective pair, "independent/dependent," was chosen for its face validity. The other nine adjective pairs, selected from Osgood (1957), had demonstrated that they, of all pairs of adjectives factor-analyzed, possessed the highest loadings on the Activity, Evaluative, and Potency dimensions of meaning.

Reliability and Validity: No test-retest reliability coefficients are available.

For a sample of 150 patients who had undergone cardiac valve replacement surgery at least 1 year earlier, the following significant correlations were obtained: between Sick Role Acceptance score and score on Cornell Medical Index (CMI), Sections A–L, $r = -0.26$; between Sick Role Acceptance score and score on Cornell Medical Index (CMI), Sections M–L, $r = -0.20$. These negative correlations imply that individuals perceiving themselves as "most unlike the sick" reported fewer physical and emotional symptoms on the CMI than did individuals perceiving themselves as "most like the sick."

In addition, the individual's Sick Role Acceptance score correlated significantly ($r = 0.37$) with a second measure of perceived health. This second measure was the individual's self-rating indicated on a 9-interval vertical Dembo line, the top of which was designated, "The healthiest I could be," and the bottom, "The sickest I could be."

Finally, Sick Role Acceptance score correlated 0.263 with the fact of returning, or not returning, to work following surgery.

Use in Research: Brown and Rawlinson (1975) used this instrument in research investigating the extent of the recovery of patients 1 year or more following cardiac valve replacement surgery. The sample was comprised of 150 patients, of whom 87 were male, and 63 female. The mean age of the sample was 48.2 years.

Comments: Brown and Rawlinson (1975) reported that the dimension of potency did not distinguish between concepts in their research.

> We attribute this to an unfortunate selection of adjectives to represent that factor. Our post hoc explanation is that the adjective pairs "heavy/light" and "large/small" are ambiguous. They may imply variations in weight, which is a property to be strictly controlled by many heart patients, or they may carry overtones of a psychological burden, as depression or oppression (Brown and Rawlinson, 1975).

The authors have revised their instrument and are using the revised instrument in ongoing research. However, Brown and Rawlinson's instrument described here may be applicable to groups of individuals other than open-heart surgery patients. Anyone contemplating using the semantic differential technique should consult the references cited below.

References:

Brown, Julia S., and Rawlinson, May E. Relinquishing the sick role following open-heart surgery. *Journal of Health and Social Behavior*, 1975, *16*, 12–27.

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______. Sex differences in sick role rejection and in work performance following cardiac surgery. *Journal of Health and Social Behavior* (in press).

Osgood, Charles E. *The measurement of meaning*. Urbana: University of Illinois Press, 1957.

Snider, G., and Osgood, Charles E. *Semantic differential techniques*. Chicago: Aldine Publishing Co., 1969.

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Instrument Copyright: None.

Brown, Julia S., and Rawlinson, May E.

SICK ROLE ACCEPTANCE (MEASURE 1)

The purpose of this study is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page of this booklet you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order. Here is how you are to use these scales:

If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check-mark as follows:

Fair:_X_:___:___:___:___:___:___Unfair
OR
Fair:___:___:___:___:___:___:_X_Unfair

If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:

Fair:___:_X_:___:___:___:___:___Unfair
OR
Fair:___:___:___:___:___:_X_:___Unfair

If the concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:

Active:___:___:_X_:___:___:___:___Passive
OR
Active:___:___:___:___:_X_:___:___Passive

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you're judging.

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your check-mark in the middle space.

Safe:___:___:___:_X_:___:___:___Dangerous

IMPORTANT: (1) Place your check-marks in the middle of spaces, not on the boundaries.

THIS:_X_:___:___: NOT THIS ___X___

(2) Be sure you check every scale for every concept-do not omit any.

(3) Never put more than one check-mark on a single scale.

Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test--make each item a separate and independent judgment. Work fairly fast. Do not worry or puzzle over individual items. It is your first impression we want. On the other hand, do not be careless, because we want your true impressions.

MYSELF

hard _____:_____:_____:_____:_____:_____:_____ soft

good _____:_____:_____:_____:_____:_____:_____ bad

dependent _____:_____:_____:_____:_____:_____:_____ independent

unfair _____:_____:_____:_____:_____:_____:_____ fair

fast _____:_____:_____:_____:_____:_____:_____ slow

cold _____:_____:_____:_____:_____:_____:_____ hot

large _____:_____:_____:_____:_____:_____:_____ small

heavy _____:_____:_____:_____:_____:_____:_____ light

dull _____:_____:_____:_____:_____:_____:_____ sharp

dirty _____:_____:_____:_____:_____:_____:_____ clean

MOST PERSONS WHO ARE SICK

sharp _____:_____:_____:_____:_____:_____:_____ dull

fair _____:_____:_____:_____:_____:_____:_____ unfair

light _____:_____:_____:_____:_____:_____:_____ heavy

clean _____:_____:_____:_____:_____:_____:_____ dirty

slow _____:_____:_____:_____:_____:_____:_____ fast

hard _____:_____:_____:_____:_____:_____:_____ soft

cold _____:_____:_____:_____:_____:_____:_____ hot

small _____:_____:_____:_____:_____:_____:_____ large

independent _____:_____:_____:_____:_____:_____:_____ dependent

good _____:_____:_____:_____:_____:_____:_____ bad

Title: HEALTH SELF-CONCEPT

Authors: Jacox, Ada, and Stewart, Mary

Variable: Health self-concept refers to "one's concept of himself as a relatively ill or healthy person."

Description:

Nature and Content: This self-report instrument consists of seven items to which the subject responds yes or no. The items relate to a person's assessment of himself as an "ill person." For example, "Are you frequently ill?" "Do you consider yourself a sickly person?"

The index was developed for use with hospitalized patients experiencing varying degrees of pain, and currently exists in two forms. One form is for patients experiencing "progressive pain" resulting from illnesses for which death is a highly probable outcome, such as metastatic cancer; the other form is for the more typical patient. For the former, wording on several of the items was changed to reinforce the notion that the questions did not relate only to current illness. As the authors state, "We did not believe that we could ethically ask patients with matastatic cancer . . . such questions as . . . 'Are you constantly made miserable by poor health?' " (Jacox and Stewart, 1973).

Administration and Scoring: No special provisions are necessary for administration of the index. It can be completed by any patient who is literate and well enough to read and write; instructions for completion precede the first item. Patients should be told that they are to answer in terms of their lifetimes, not just in terms of the current illness. No more than 5 or 10 minutes should be needed for completion.

No information on scoring was provided.

Development:

Rationale: The index was developed for use in a study of psychosocial problems related to pain and illness (Jacox and Stewart, 1973). This investigation was predicated on the assumption that pain cannot be viewed simply as a physiological phenomenon, but it must be conceptualized within a biopsychological framework. Health self-concept is one factor investigators have found to influence pain perception and response.

Source of Items: The Health Self-Concept Index is a modification of a subscale (J) from the Cornell Medical Index (Jacox and Stewart, 1973).

Procedure for Development: The authors modified the J scale of the Cornell Medical Index by combining two items, eliminating one, and changing the wording of two others.

Reliability and Validity: No reliability information was provided.

The index has face validity, and some evidence for construct validity is available. The Health Self-Concept Index was administered to 102 patients admitted to a large university medical center. Thirty-one were experiencing short-term pain (associated with elective surgery), 32 had long-term pain (associated with chronic illness, such as arthritis), and 40 suffered from progressive pain (associated with terminal illness, such as metastatic cancer). Only those patients who had experienced pain associated with their illness during the week preceding the study were included in the sample. Jacox and Stewart (1973) found a negative relationship between extraversion and health self-concept for three groups. They felt that these findings were in accordance with Eysenck's conceptualization of neuroticism and extraversion (Jacox and Stewart, 1973).

Use in Research: The instrument was developed for use in a study reported by Jacox and Stewart (1973). The Health Self-Concept Index Patient Interview (relating to patient's pain history), Eysenck Personality Inventory, (Psychosocial) Problems Inventory, and the Modified Melzack Pain Description were administered to the sample described above to test hypotheses relating to the psychosocial contingencies of the pain experience.

Comments: The Health Self-Concept Index is brief, direct, and has face validity. However, the obvious face validity of the items may be a liability in some situations, since the "fakeability" of self-report in this sensitive area seems high. Changes from the original index are sufficiently great to warrant the collection of new reliability and validity data. Jacox and Stewart have begun this task.

References:

Jacox, A., and Stewart, M. *Psychosocial contingencies of the pain experience* Grant No. NU-00387-02). Iowa City: University of Iowa, 1973.

Source of Information:
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Instrument Copyright:
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Jacox, Ada, and Stewart, Mary

HEALTH SELF-CONCEPT

HEALTH SELF-CONCEPT

1. Are you frequently ill?
2. Are you frequently confined to bed by illness?
3. Are you always in poor health?
4. Are you considered a sickly person?
5. Do you come from a sickly family?
6. Do severe pains and aches make it impossible for you to do your work?
7. Do you wear yourself out worrying about your health?
8. Are you always ill and unhappy?
9. Are you constantly made miserable by poor health?

HEALTH SELF-CONCEPT
(Used with short-term and long-term groups)

Instructions: For each of the following questions, please circle "Yes" if it is generally true of you and "No" if it is not.

1. Are you frequently ill? Yes No
2. Are you frequently confined to bed by illness? Yes No
3. Do you consider yourself to generally be in poor health, or a "sickly" person? Yes No
4. Do you come from a family that has had a large amount of illness? Yes No
5. Do severe pains and aches make it impossible for you to do your work? Yes No
6. Do you worry a lot about your health? Yes No
7. Are you constantly made miserable by poor health? Yes No

Total ______

HEALTH SELF-CONCEPT
(Used with progressive group)

Instructions: For each of the following questions, please circle "Yes" if it is generally true of you and "No" if it is not.

1. Have you frequently been ill in your lifetime? Yes No
2. Have you frequently been confined to bed by illness prior to present illness? Yes No
3. Have you considered yourself to generally be in poor health, or a "sickly" person? Yes No
4. Do you come from a family that has had a large amount of illness? Yes No
5. Have severe pains and aches often made it impossible for you to do your work? Yes No
6. Have you worried a lot about your health? Yes No
7. Have you been constantly made miserable by poor health prior to this current illness? Yes No

______

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Title: LIFE SPACE DRAWING TECHNIQUE

Author: Stein, Rita

Variable: This technique was designed to determine perceptions of self in relation to significant others, self-esteem, and social distance.

Description:

Nature and Content: The Life Space Drawing is a projective technique designed to obtain an expression of one's feelings toward self and others that are not easily obtainable by direct questioning or other overt methods. It is a method for getting the respondent to structure his own social world with virtually no interference or influence from the examiner.

Administration and Scoring: The subject should be placed in a quiet room equipped with a table and chair. After a brief task orientation, the subject is given a blank sheet of paper and a pen or pencil, and asked to draw a circle in the center of the page and label it "Me." Around this "Me," the subject is asked to draw circles representing those people to whom he(she) feels closest in close alignment with the "Me" circle, while those people to whom he(she) feels more distance should be represented by circles increasingly farther from the "Me" circle. The subject is asked to label the circles in terms of relationship, such as mother, father, sister, brother, friend, and "other."

For scoring, the author provided the following directions: "Measure the 'Me' circle, then measure the distance of each of the other circles from the 'Me' circle." For details of how the author scored on the instrument, the reader should consult the Stein (1971) reference cited below.

Development:

Rationale: The author did not specify an underlying theory.

Source of Items: Not applicable as such.

Procedure for Development: No information was provided.

Reliability and Validity: The Life Space Drawing's reliability and validity are difficult to assess because there are as yet, no normative representative groups with which to compare (Stein, 1971). However, the author's study (Stein, 1971) which used the technique to examine social processes of two ethnic groups of adolescent boys (one disturbed group and one control group) revealed findings that coincided with the kinds of disturbance exhibited and in line with the personality attributes identified by the Edward Personal Preference Schedule.

Use in Research: A description of the Life Space Drawing technique as used in a study of disturbed adolescent Italian-American and Irish-American boys is contained in Stein's (1971) publication referenced below.

Comments: Validity of the measure depends, in turn, upon the validity of the two projective hypotheses: (1) that the size of the "Me" circle drawn is correlated with self-concept, and (2) that the physical distance on paper corresponds with psychological distance. The expected ethnic differences found by the author's study suggest some evidence of validity. The author stated that examples of Life Space Drawings could be obtained from her.

References:

Stein, Rita. *Disturbed youth and ethnic family patterns.* Albany: State University of New York Press, 1971.

______. Personal communication, 1976.

Source of Information:

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Instrument Copyright: None.

Client Affective Variables: Psychological Health Status

Title: WARD BEHAVIOR INVENTORY (WBI)

Authors: Burdock, Eugene I., and Hardesty, Anne S.

Variable: The WBI measures the severity of psychopathological disturbance shown in the ward behaviors of hospitalized adult psychiatric patients.

Description:

Nature and Content: The WBI consists of 138 items for recording observations of appearance and bearing, verbal behavior, and adaptation to ward routine. The items were constructed so as to reflect observable units of behavior. They describe such characteristics as facial expression, grooming, eating, toileting, physical status, habits, cooperativeness, communicativeness, vocalization and speech patterns, interpersonal relations, hostility or aggressiveness, mannerisms, and affect. Explanatory examples have been provided parenthetically on the form where the authors deemed such examples might be helpful.

Administration and Scoring: The WBI is intended to record the patient's observed behavior during a specified observational period. The author reports (personal communication) that different methods have been employed. For example, if a research nurse is used for data collection, at least 2–3 hours of observation are needed. In most cases, however, data are collected by a regular staff member, and a whole shift may be used as the observation period. Historical material or facts about the patient's behavior, other than that observed during the specified observation period, must be disregarded.

An observer judges each item and marks "Y" (for "Yes" when the patient displays the indicated behavior) or "N" (for "No" when the patient does not behave in the manner described). The observer must mark every item to the best of his ability, even if he must guess. The patient is to be independently evaluated on each item, not compared with other patients. A trained observer requires approximately 10 minutes per patient to complete the inventory at the end of the observation period.

Each item is scored 1 or 0. Maladaptive behavior (usually "yes" answers) is scored 1. There are nine items (10, 49, 58, 61, 74, 77, 80, 110, 121) for which a "No" indicates maladaptive behavior; these must be reverse scored. Total scores range between 0 and 138; the higher the score, the more disturbed the patient. A detailed manual describing the administration and scoring procedure and providing an extensive bibliography is available (Burdock and Hardesty, 1968).

Development:

Rationale: The WBI represents a pragmatic and a theoretical approach to providing detailed and uniform information about a patient's abnormal behavior. The authors have aimed at a molecular level of specificity. The intention is to increase objectivity by penetrating through the global level of generalization to the observable behavior (Burdock and Hardesty, 1968).

Source of Items: The manual (Burdock and Hardesty, 1968) mentions six previously published rating schemes and scales that were considered in the construction of the WBI.

Procedure for Development: The items were tested for clarity and specificity with nurses and ward attendants. In a pilot study of 28 patients in a VA hospital, a point biserial correlation analysis identified 122 items whose correlations were significantly different from 0. On the basis of this analysis, some items were reworded, the direction of scoring one item was changed, and one item was replaced. Because of the restricted nature of the sample and the truncated distribution of the point biserial correlation, no items were rejected solely on the basis of this analysis.

Reliability and Validity: Reliability in terms of interobserver agreement has been investigated extensively. Intraclass correlation coefficients ranged from 0.57 to 0.87 (two-thirds were in the high 0.70's or better) for pairs of ratings on samples of patients by regular ward nurses and attendants in six institutions. Mean intraclass *r*'s for eight hospitals at which research nurses made paired observations of acute schizophrenics ranged from 0.79 to 0.89 over four observation periods.

Hoyt's analysis of variance technique was applied to an item-by-patient matrix to produce an index of internal consistency equivalent to the Kuder-Richardson (K-R) Formula 20 test-retest coefficient. Values ranging from 0.88 to 0.96 were obtained for samples at seven State hospitals and a psychiatric institute. The authors claim that this evidence of item homogeneity supports the decision to employ total score as a measure of severity of illness.

The reliability of the internal consistency analysis was evaluated in a study in which four different observers independently assessed the same sample of 28 patients in a VA hospital. Internal consistency remained stable across observers with K-R 20 coefficients ranging from 0.85 to 0.92.

Work has been done to establish the construct validity of the WBI. WBI scores were compared with scores obtained from the Structured Clinical Interview, a technique devised to provide quantitative indices of salient psychopathology displayed during a psychological interview. For a sample of 73 newly admitted patients, correlations between the WBI and the interview inventory were 0.22 when the latter was completed in an unstructured interview and 0.35 when it was completed in a structured interview.

Changes in scores on a preliminary form of the WBI indicated significant improvement for a group of geriatric patients who underwent intensive psychiatric treatment as compared to an untreated control group (Burdock et al., 1960). The WBI was used as a criterion measure a second time in a study of treatment with psychoactive drugs. It detected changes in patient pathology in three out of four comparisons.

In another study of psychoactive drug effectiveness in the treatment of schizophrenia, the WBI total score was the best single measure (of 20 assessment instruments) for discriminating between drugs and placebo (Burdock and Hardesty, 1968).

Use in Research: The WBI has been used in numerous published studies with geriatric patients, both acute and chronic schizophrenics on a variety of drug regimens. An extensive bibliography is included in the test manual (Burdock and Hardesty, 1968).

Comments: The WBI appears to be a well-developed and well-tested instrument. Administration and scoring is simple and straightforward, and it can be accomplished in a short time. Reliability and validity have been extensively tested and reported.

It should be noted that interobserver reliabilities have been marginal for situations in which untrained ward nurses and ward attendants were used as observers. Maximum precision has been obtained when observers were required to complete a training session in the use of the instrument.

References:

Burdock, Eugene I., and Hardesty, Anne S. *Ward Behavior Inventory: Manual.* New York: Springer, 1968.

Burdock, Eugene I., Elliott, H. E., Hardesty, Anne S., O'Neill, F. J., and Sklar, J. Biometric evaluation of an intensive treatment program in a state mental hospital. *Journal of Nervous and Mental Disorders*, 1960, *130*, 271–277.

Source of Information:

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Instrument Copyright:

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Burdock, Eugene I., and Hardesty, Anne S.

WARD BEHAVIOR INVENTORY (WBI)

ID NUMBER ______________ NAME ____________________________ SEX ____________
Last First Middle

DATE OF BIRTH ____________________ HOSPITAL ______________ SERVICE ____________
Month Day Year

OBSERVER ____________________ DATE OF OBSERVATION ________________________
Month Day Year

Instructions: All items must be answered. For each item record whether or not you have observed the behavior described by making a vertical line through Y for yes or N for no. Use pencil; erase completely any marks you wish to change.

1. Is noisy. Y N
2 Shouts or yells. Y N
3. Refuses treatment. Y N
4. Says he wants to die. Y N
5. Refuses to eat. Y N
6. Loses something. Y N
7. Tries to kill himself. Y N
8. Has a blackout or fit. Y N
9. Acts afraid. Y N
10. Looks clean. Y N
11. Tries to escape. Y N
12. Shows suspicion. Y N
13. Needs help in eating. Y N
14. Says he hates people. Y N
15. Weeps or wrings hands, etc. Y N
16. Is sarcastic. Y N
17. Looks angry. Y N
18. Head shakes. Y N
19. Does not talk at all. Y N
20. Demands medicine. Y N
21. Plays with genitals. Y N
22. Initiates talk about sex. Y N
23. Bumps into things. Y N
24. Is slow in his movements. Y N
25. Complains about other patients. Y N
26. Does not answer when spoken to. Y N
27. Deliberately hurts himself. Y N
28. Complains of insomnia. Y N
29. Walks with unsteady gait. Y N
30. Says that he had a bad dream. Y N
31. Has a downcast or mournful expression. Y N
32. Says that people do not like him. Y N
33. Needs help in dressing. Y N
34. Resists or refuses to follow directions. Y N
35. Misidentifies name or position of staff member. Y N
36. Moves about restlessly. Y N
37. Curses or swears. Y N
38. Has a temper tantrum. Y N
39. Insists that he has to get out. Y N
40. Gets irritated. Y N
41. Says he is afraid. Y N
42. Acts nervous or agitated. Y N
43. Takes and holds strange pose. Y N
44. Deliberately hits or hurts someone. Y N
45. Jokes or jests insistently. Y N
46. Shows anger when questioned. Y N
47. Has attack of panicky fear. Y N
48. Says he does not know who he is. Y N
49. Acts friendly with someone on the ward. Y N
50. Acts bewildered and confused. Y N
51. Has a blank expression. Y N
52. Wets bed or clothing (Incontinent). Y N
53. Has to be reminded what to do. Y N
54. Needs help in washing or showering. Y N
55. Refuses or discards his medicine. Y N
56. Touches or caresses member of the same sex. Y N

57. Indicates that he does not know where he is. Y N
58. Tries to help with ward chores. Y N
59. Keeps talking about religion, politics, or morals. Y N
60. Misidentifies patient or thing around him. Y N
61. Joins in social game (cards, etc.) Y N
62. Does the opposite of what he is asked to do. Y N
63. Keeps giggling in a foolish way. Y N
64. Eggs on other patient to complain or rebel. Y N
65. Shows sudden change of mood. Y N
66. Complains of imaginary bad smell. Y N
67. Complains about hospital routine. Y N
68. Tells story which is almost certainly not true. Y N
69. Places entire blame for his illness or condition on someone else. Y N
70. Tries to start fight or argument. Y N
71. Swallows something other than food. Y N
72. Denounces relative, friend or associate. Y N
73. Suddenly changes his mind. Y N
74. Mentions or engages in a hobby that can be pursued alone. Y N
75. Says he is going to kill himself. Y N
76. Keeps eyes closed or averted or head bowed down. Y N
77. Strikes up conversation with someone on the ward. Y N
78. Acts unpleasant or offensive toward staff member. Y N
79. Has to be helped in the bathroom. Y N
80. Readily participates in recreation and entertainment. Y N
81. Speech is both slow and full of pauses. Y N
82. Ignores people or objects around him. Y N
83. Mentions that he cannot get rid of certain thoughts. Y N
84. Speech is nonsensical or meaningless. Y N
85. Describes some horrible act or event with obvious enjoyment. Y N
86. Gets upset when something does not suit him. Y N
87. Smears himself or surroundings with food or feces. Y N
88. Says that someone is trying to kill him. Y N
89. Blames himself for what he has done or failed to do. Y N
90. Hands or legs tremble. Y N
91. Jokingly says he will commit suicide. Y N
92. Repeats some act over and over again as though driven. Y N
93. Makes exaggerated claim of power or fame. Y N
94. Speech keeps changing from fast to slow. Y N
95. Says that family, staff or others hate him or are against him. Y N
96. Says that his body is rotting or decaying. Y N
97. Claims that his mind is being controlled. Y N
98. Talks, mutters or mumbles to himself. Y N
99. Says that he is not sick and should not be here. Y N
100. Shows no interest in newspaper, magazine, radio or TV, etc. Y N
101. Clothes are unbuttoned, untidy or bizarre. Y N
102. Says that he gets creeping or crawling sensation on his body Y N
103. Has to be helped along to stick to anything he has been given to do. Y N
104. Does not move about unless directed into some activity. Y N
105. Complains about his pains or his physical condition. Y N
106. Shows inappropriate emotional response (e.g., laughs at occasion of death or disaster). Y N
107. Talks to his voices or acts as if he hears voices. Y N
108. Soils bed or clothing with excrement. Y N
109. Keeps talking about everything that comes into his mind. Y N

110. Helps ward personnel with other patients. Y N
111. Insists on telling his problems to everyone who will listen. Y N
112. Has tic or twitch (e.g., distorts face, turns neck, blinks). Y N
113. Repeats words and phrases in a meaningless and mechanical manner. Y N
114. Mentions that his food tastes or suspicious or that his food looks like poison. Y N
115. Says that people or objects look strange and distorted. Y N
116. Rubs, scratches or licks himself or pulls out hair or picks at skin. Y N
117. Hoards things (carries things hidden in paper bags, hides things under bed, etc.). Y N
118. Must be directed or urged to take part in ward activity. Y N
119. Indicates that he is sexually attracted to member of the same sex. Y N
120. Attempts sexual aggression toward member of opposite sex. Y N
121. Holds conversation with attendant or nurse. Y N
122. Acts as if he has a vision or talks about his vision. Y N
123. Speech is blurred as if from a thickened tongue. Y N
124. Is impatient (will not wait for something to be given him or to be done for him). Y N
125. Without reason accuses someone (patient or ward personnel) of wanting to hurt him. Y N
126. Makes homosexual suggestion or advance. Y N
127. Says that certain things have special meanings that only he understands. Y N
128. Says he sometimes feels like committing a violent act. Y N
129. Complains about the behavior of the staff. Y N
130. Says that he is a failure or that he is inferior. Y N
131. Says that he has a fatal illness or that he expects to die soon. Y N
132. Hides from doctor or ward personnel. Y N
133. Says that he feels as if his body does not belong to him. Y N
134. Deliberately tears or breaks something. Y N
135. Says that part of his body has changed unaccountably in size or shape. Y N
136. Says that he feels depressed or despondent. Y N
137. Either mixes up words, or repeats sounds, or makes up new words. Y N
138. Remains in bed without good reason. Y N

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Title: THE CHILD HEALTH QUESTIONNAIRE

Author: Butler, Alan C.

Variable: This instrument measures psychological health in young children from about 6 years of age (kindergarten and first grade) to 9. Psychological health, as opposed to mental illness and also as distinguished from the statistically normal, is conceived of as a positive, creative, growth-oriented condition which can be observed in the child's behavior in five categories of criteria: (1) physical: a child who has good physical health and accepts his own body; (2) cognitive: a child who is original, creative, and possesses a wide range of interests; (3) social: a child who is comfortable with others and who demonstrates some leadership and responsibility; (4) emotional: a child who makes appropriate use of a variety of affective responses; and (5) play: a child whose play activities reflect freedom, spontaneity, and flexibility. Overall, the psychologically healthy child is expected to possess a high porportion of the total number of these health characteristics.

Description:

Nature and Content: This 20-item teacher's rating scale lists 20 descriptive statements pertaining to a child's psychological health. Examples are: "Rarely complains of aches and pains," "can assume responsibility appropriate for age," and "demonstrates flexibility in dealing with play materials or problems which arise." Choices for answers are "certainly applies," "applies somewhat," and "doesn't apply." In addition, the teacher is asked at the beginning of the questionnaire how well he(she) knows the child ("very well," "moderately well," or "not very well"). Following the 20 items, the teacher is also asked to state other special characteristics which would be important in gaining a fuller understanding of the child. Clear directions for completing the questionnaire are provided.

It is important to note that this instrument is not an observational tool. Rather, the items require the user to draw upon his(her) direct and indirect knowledge of the child and to make value judgments.

Administration and Scoring: Two slightly modified versions of the Child Health Questionnaire were initially devised for teachers and parents. However, the experience of administering the scale to parents revealed greater parental bias and less differentiation of scores than with teachers. The person rating the child will nevertheless have to be in a position to observe the child in a variety of situations. The scale itself can be filled out in about 2 minutes per child.

Scores are assigned to the answer categories: each "certainly applies" answer = 2 points; each "applies somewhat" answer = 1 point; each "doesn't apply" answer = 0 points.

Individual scores for each of the 20 items are totaled to produce an overall score (from 0 to 40). A cutoff score of at least 34 without any 0 ratings has been established as the point in identifying the psychologically healthy child. The cutoff score implies a greater likelihood for children with high scores to be functioning in a psychologically healthy direction.

Development:

Rationale: Believing that psychological health in the child is not simply the absence of illness, nor the presence of behaviors within a statistical range of normal, the author based the questionnaire on a theoretical model of health as a creative, growth-oriented process.

Sources of Items: An intensive search of the literature revealed 22 health criteria appropriate to children at ages 6 to 9. These criteria were refined and divided into the five health categories of the scale.

Procedure for Development: The questionnaire was developed solely from specific health criteria as part of a positive approach to psychological health. During the development of the scale, frequent meetings with teachers, parents, and practicing child clinicians were used to assure that the items in the scale reflected true health patterns of the child. Further interviews with parents and teachers completing the scale were used to determine whether any items or instruction was ambiguous or misunderstood.

A pilot study was conducted by administering the instrument to a pool of 50 children comprising the two first grade classes in a middle-class, Midwestern elementary school. Twelve of the 50 children were identified as possessing a high proportion of psychological health characteristics. As an initial criterion measure of psychological health, two practicing child therapists offered their assessment via interviews with five children who had high scores on the CHQ and five children who had low scores on the CHQ. There was complete agreement about the 10 children between the therapist and the results of the scale. In addition, school records were reviewed, and teachers, parents, and the principal were interviewed regarding the emotional and social behavior of each child. None of the teachers, parents, or clinicians knew the exact nature of the scale until after the study was completed. As a result of these preliminary studies, an arbitrary cutoff of approximately one standard deviation or a score of 33 or above was used to distinguish those children with a high proportion of psychological health characteristics. The score was raised 1 point in the final version.

Reliability and Validity: Interrater reliabilities involved the judgments of the current first grade teacher and past kindergarten teacher. For 50 urban middle-class children, the coefficient was 0.76; for 20 rural lower-class children, the coefficient was 0.79. Odd-even internal consistency coefficients for four kindergarten and first grade teachers ranged from 0.82 to 0.89.

These reliability coefficients may be reflecting consistency in the teachers' shared value system and shared opinion of the children.

A comparison of CHQ scores with scores on Rutter's Behavior Questionnaire, a measure of emotional and behavioral disorders, showed a phi coefficient of −0.76 for the urban sample and −0.81 for the rural sample, suggesting concurrent validity for the CHQ. It was felt that a medium to high inverse relationship with Rutter's scale would provide an indication that children scoring high on psychological health characteristics did not also possess maladaptive behavioral characteristics.

When the school records of high-CHQ-score children were examined and the teachers and parents interviewed, it was found that 16 of the 19 highest CHQ children in both urban and rural samples seemed to be living a life at home and at school which was consistent with his(her) performance on the CHQ.

Use in Research: The questionnaire has been used by Butler in two studies: "Exploring the World of a Healthy Child" (1970) and "The Child Health Questionnaire: Preliminary Data" (1975), the former an unpublished doctoral dissertation (University of Maine) and the latter appearing in *Psychology in the Schools*, 1975, *12*, 153–160.

Comments: The model adopted by the author for psychological health is relatively broad, so the CHQ includes items on topics from creativity, range of interest, and leadership roles to dealing with other children, self-acceptance, and utilization of play materials. The variety of items suggests that perhaps "psychological health" should be analyzed into parts or reduced to several factors as part of the continual evolution of the measure.

In addition, individual items could be further refined to be univariate, behavior specific, and not dependent on the rater's value system.

References:

Butler, Alan C. *Exploring the world of a healthy child.* Unpublished doctoral dissertation, University of Maine, 1970.

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Spivack, G., and Swift, M. A critical review of teacher-administered rating scales. *Journal of Special Education*, 1973, *7*, 55–89.

Source of Information:

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Orono, Maine 04473

Instrument Copyright:

Clinical Psychology Publishing Company, Inc.
4 Conant Square
Brandon, Vt. 05733

Butler, Alan C.

THE CHILD HEALTH QUESTIONNAIRE

To Be Completed by Teachers

Name of Child ______________________ Age ______ Sex _____ Date _____

How well do you know this child? Very well______ Moderately well ______ Not very well______

Below are a series of descriptions of behavior often shown by children. After each statement are three columns, "Certainly Applies," "Applies Somewhat," and "Doesn't Apply." If the child definitely shows the behavior described by the statement, place an "x" under the "Certainly Applies" column. If the child shows the behavior described by the statement but to a lesser degree or less often, place an "x" under the "Applies Somewhat" column. If, as far as you are aware, the child does not show the behavior, place an "x" in the "Doesn't Apply" column. Please put an "x" for each statement.

Statement	Certainly Applies	Applies Somewhat	Doesn't Apply
1. Has good physical health (few colds)			
2. Rarely complains of aches and pains			
3. Speech is clear for age			
4. Demonstrates appropriate use of intelligence			
5. Is unique, original, or creative			
6. Demonstrates a wide range of interests			
7. Is intellectually curious			
8. Relates well with other children			
9. Relates well with teachers			
10. Can quickly establish a trusting relationship			
11. Can assume responsibility appropriate for age			
12. Demonstrates leadership with peers			
13. Demonstrates a wide range of feelings appropriately			
14. Expresses himself well (is understood by others)			
15. Expresses both positive feelings (love) and negative feelings (anger) directly			
16. Is accepting of himself			
17. Is free and spontaneous in play			
18. Utilizes a variety of play materials			
19. Demonstrates flexibility in dealing with play materials or problems which arise			
20. Demonstrates flexibility in dealing with other children			
Statement	Certainly Applies	Applies Somewhat	Doesn't Apply

Are there any other special characteristics which would be important in gaining a fuller understanding of this child?

....

....

....

....

Thank you very much for your help.

Signature: Mr./Mrs./Miss ....

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Title: PARS V COMMUNITY ADJUSTMENT SCALE

Author: Ellsworth, Robert B.

Variable: The instrument measures community adjustment of discharged psychiatric patients. Community adjustment is operationally defined as having two component parts: personal adjustment and role skills.

Description:

Nature and Content: Ellsworth (1975) states that the PARS V Scales combine the features of a fixed scale and a modified goal attainment scale for each client. There is a PARS V Community Adjustment Scale pretreatment and posttreatment form for females and a pretreatment and posttreatment form for males. The basic scale is a 4-page instrument which contains 37 items addressed to the frequency of specified behavioral incidents, 2 items related to earned income, 9 items related to possible patient problems the informant may have perceived during the past month, and 8 items of demographic data of the respondent. The areas identified by the author as being covered in the instrument are: (1) interpersonal involvement, (2) anxiety-depression, (3) confusion, (4) alcohol/drug abuse, (5) household management, (6) relationship to children, (7) outside social involvement, and (8) employment. Most items can be answered by placing a check in the space provided for the answer of choice. Examples of items are: "During the last month, has he said people don't care about him? (never, rarely, often, almost always.) During the past month, has he had problems talking and relating to you and with people close to him? (no problems, some problems, serious problems.)"

Administration and Scoring: The PARS V is to be completed by a "significant other" of the patient. If the patient is married, the spouse is the preferred source of information. If the patient is not married, a relative who has the most frequent contact with the patient is asked to complete the instrument. The patient is asked to supply the name of the "significant other" to be contacted, and confidentiality of the information should be assured. An explanation of the need for the data is printed on the first page of the instrument. Easy-to-follow instructions for the form precede the first item.

The score to be assigned each answer is indicated on the form. The coded scores on the forms are summed to provide an overall pretreatment score and an overall posttreatment score. The patient's scores are compared with the appropriate norm table to determine how he(she) compares with other patients at comparable stages of treatment. Detailed instructions for administration, scoring, and interpretation of the scores, as well as norms, are provided in the manual (Ellsworth, 1975).

Development:

Rationale: The effectiveness of mental health services can be measured most directly by comparing a client's posttreatment community adjustment with his(her) functioning prior to treatment (Erickson, 1975; Evenson et al., 1974; Hargreaves et al., 1975). The PARS V attempts to evaluate treatment in the light of Paul's (1967) findings that the most promising criteria are those behavioral changes that occur outside the treatment setting.

Source of Items: The items were based upon a review of professional literature and the professional experience of the author.

Procedure for Development: An initial pool of items (120 items for females, 115 items for males) was developed. Using the criteria of (1) item retest reliability, (2) t-test differences in pretreatment and posttreatment ratings, and (3) factor loadings, the initial pool was reduced to 57 PARS III items. In the selection of items that were scored for the PARS V Scales, two other criteria were added: (4) each item was examined for its effect on the internal consistency of factor scales (Cronbach's Alpha, 1951), and (5) the F ratio for each item as it differentiated between clinic, hospital, and nonclinic populations was examined.

The PARS V, then, uses those items of the PARS III that were found to be the most reliable, that differentiated best between clinic and hospital and pretreatment and posttreatment groups, and that were the most salient measures of different adjustment areas as reflected by high factor loadings. In addition, further ratings had revealed that the previous 5-point answer choice was not usually necessary—the categories of "never" and "always" were used so infrequently that a 4-choice scoring format was adopted.

According to the author, two other important changes were made in the standardized PARS V Scales. Some features of goal setting were built into the scales by a system of score weights, and standards or norms for improvement were developed. Each patient or client being rated by the PARS V can now be scored in terms of whether he improves more or less than others with similar initial levels of adjustment by using standardized improvement or residual scores—actual outcome minus predicted outcome (Ellsworth, 1974). Also, score changes in those areas judged by the rater to be serious problems for the client are given more weight in calculating the total post-treatment adjustment score.

Reliability and Validity: The author reports test-retest *r*'s ranging from 0.80 to 0.92. Using Cronbach's (1951) Alpha internal consistency, *r*'s ranged from 0.67 to 0.94.

PARS Scale reliability and validity ratings are treated in 12 pages of information and data in the manual. In summary, the predictive validity of the instrument was assessed by using the PARS scores to predict group membership as a hospitalized patient, clinic patient, or nonclinic patient. F ratios were all highly significant, with Anxiety and Confusion the best predictors. (F ratio between 48.70 to 69.57, $p < 0.01$). Using the three best PARS scores as predictors, an average of 75.5 percent of hospitalized patients, clinic patients, and nonclinic patients were accurately classified into their respective groups (Ellsworth, 1975).

Concurrent validity is suggested by the finding that pretreatment ratings of adjustment by patients correlated well with ratings by their "significant others" (*r*'s up to 0.76).

Use in Research: The author did not provide this information specifically for the PARS V. However, the PARS III Scales have been used in several hospitals and clinics. Eight mental hospitals and 22 clinics returned a sufficiently large number of pretreatment and posttreatment PARS III ratings for inclusion in the data analysis and development of the PARS V.

The sample was as follows:

Female	Male
Clinic N = 299	Clinic N = 185
Hospital N = 320	Hospital N = 256

A bibliography of studies which have utilized the PARS instruments is contained in the manual.

Comments: A detailed description of the development of the PARS V Scale is available in the manual.

The potential user of the PARS should be cognizant of the advantages and disadvantages of using a "significant other" person as the source of data. While the reliability of the other person as a data source is sometimes questionable, the relevance of the data is often superior, as the author suggests. Any potential user should examine the items carefully to be certain they will elicit the information he(she) seeks. Some of the items are complex, i.e., "become drunk on alcohol or high on drugs." This problem could be eliminated by making each item address only one idea or thought. Those items which are time-referenced, e.g., "sometimes," "rarely," "often," introduce a possible source of inconsistency in interpretation by respondents.

In summary, however, the sound, methodological development of this instrument is impressive.

References:

Cronbach, L. J. Coefficient alpha and the internal structure of tests. *Psychometica*, 1951, *16*, 297–334.

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Erickson, R. C. Outcomes studies in mental hospitals: A review. *Psychological Bulletin*, 1975, *82*, 519–540.

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Hargreaves, W. A., McIntyre, M. H., Atkinson, C. C., and Siegel, L. M. (Eds.) *Resource materials for community mental health program evaluation: IV Evaluating the effectiveness of services.* HIMH, 1975 (Available from Langley Porter Neuropsychiatric Institute, Box 4F, San Francisco, California 94143)

Paul, G. L. Strategy of outcome research in psychotherapy. *Journal of Consulting Psychology*, 1967, *31* (2), 109–117.

Source of Information:

Institute for Program Evaluation
IPEV Incorporated
Box 4654
Roanoke, Va. 24015

Instrument Copyright: Institute for Program Evaluation, Inc.

Ellsworth, Robert B.

PARS V COMMUNITY ADJUSTMENT SCALE

Pretreatment MALE Form

Name of Person Being Rated ____________ Date Sent ____________

The person named above has given us his permission to contact you for information about his community adjustment before he came for treatment. He indicated that you were someone who knew him well and had recent contact with him.

As indicated in the letter to you (accompanying this questionnaire), the information you provide now will help us better understand this person's behavior and plan for his treatment. Later on, you will again be asked to rate his community adjustment so that we can estimate the effects of our treatment and thereby improve our services to everyone.

The information you provide will be kept strictly confidential by the staff. Please answer every question to the best of your ability. In making your ratings, mark the answer that best describes his behavior during the last month. If you have additional comments, space is provided for them on page 4 and on this page.

It is important that the staff receive this information quickly. Please complete the questionnaire as soon as possible and return it to us. Your cooperation is deeply appreciated.

PLEASE ANSWER THE FOLLOWING QUESTIONS:

Your Name ____________ Date You Filled Out This Form ____________

Now, go ahead and answer the questions on pages 2, 3, and 4.

Col 63 (To be filled in by agency) Col 80

/	/						
pre	M	mo	day	yr	subj #	agency #	card

INSTRUCTIONS:

A. Please describe the person's community adjustment during the past month by answering each question below.

B. Please answer every question even though you might feel unsure of your answer.

C. Mark your answer to each question by making an X in the box under your answer choice, like this: ☒

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Rarely	2 Sometimes	3 Usually	4 Always
1 . . . Shown consideration for you. Mark one answer for each question	☐	☐	☐	☐
2 . . . Felt close to members of household.	☐	☐	☐	☐
3 . . . Discussed important matters with you	☐	☐	☐	☐
4 . . . Been able to talk it through when angry	☐	☐	☐	☐
5 . . . Cooperated (gone along) with things asked of him	☐	☐	☐	☐

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Never	2 Rarely	3 Sometimes	4 Often
6 . . . Said people don't care about him	☐	☐	☐	☐
7 . . . Said people treat him unfairly	☐	☐	☐	☐
8 . . . Complained or worried about problems	☐	☐	☐	☐
9 . . . Said people try to push him around	☐	☐	☐	☐
10 . . . Said life wasn't worth living	☐	☐	☐	☐

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Almost Never	2 Sometimes	3 Often	4 Almost Always
11. Had difficulty eating (poor appetite, indigestion, etc.)	☐	☐	☐	☐
12. Been nervous	☐	☐	☐	☐
13. Acted restless and tense	☐	☐	☐	☐
14. Had difficulty sleeping	☐	☐	☐	☐

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Never	2 Rarely	3 Sometimes	4 Often
15. Jumped from one subject to another when talking	☐	☐	☐	☐
16. Just sat and stared	☐	☐	☐	☐
17. Forgotten to do important things	☐	☐	☐	☐
18. Been in a daze, or confused	☐	☐	☐	☐
19. Needed supervision or guidance	☐	☐	☐	☐

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Never	2 Rarely	3 Sometimes	4 Often
20. Been drinking alcohol to excess	☐	☐	☐	☐
21. Been using drugs excessively	☐	☐	☐	☐
22. Become drunk on alcohol or high on drugs	☐	☐	☐	☐
23. Had a drinking or drug problem that upset his relationship with family	☐	☐	☐	☐
24. Had a drinking or drug problem that kept him from working	☐	☐	☐	☐

Please answer each question by marking your answer choice, like this: ☒

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Never	2 Sometimes	3 Often	4 Almost Always
25. Helped with chores around house	☐	☐	☐	☐
26. Done household cleaning	☐	☐	☐	☐
27. Prepared meals for the family	☐	☐	☐	☐
28. Done laundry, ironing, or mending	☐	☐	☐	☐

29. Are there usually children in the home?
(Mark one)
(1)_____ No (If you marked "No", skip to question 34)
(2)_____ Yes (If you marked "Yes", answer questions 30-33)

DURING LAST MONTH, HAS HE . . .	Answer choices			
	1 Almost Never	2 Sometimes	3 Often	4 Almost Always
30. Spent time with the children	☐	☐	☐	☐
31. Shown affection toward the children	☐	☐	☐	☐
32. Kept his promises to the children	☐	☐	☐	☐
33. Been consistent in how he reacts to the children	☐	☐	☐	☐

DURING LAST MONTH, HAS HE . . .

34 . . . Been involved in activities outside the home?
(Mark one)
(1)_____ Stayed at home this past month
(2)_____ Rarely involved outside the home
(3)_____ Involved in some outside activities
(4)_____ Often involved in outside activities

35 . . . Attended meetings of civic, church, or other organizations?
(Mark one)
(1)_____ Did not attend any meetings this past month
(2)_____ Rarely attended meetings
(3)_____ Sometimes attended meetings
(4)_____ Often attended meetings

36 . . . Participated in recreational activities outside the home (sports, movies, dances, etc.)?
(Mark one)
(1)____ No recreational activities outside the home this past month
(2)____ Rarely participated in outside recreation
(3)____ Sometimes participated
(4)____ Often participated

37. During the last month, has he looked for or obtained employment?
(Mark one)
(1)____ Unemployed; didn't look for work
(2)____ Unemployed; wanted to work, but didn't seek it
(3)____ Sometimes went out and looked for work
(4)____ Employed, had a job last month

NOTE: IF THE PERSON HAS NOT BEEN EMPLOYED, OR IS NOT EXPECTED TO WORK, PLEASE SKIP QUESTIONS 38 AND 39. GO ON TO QUESTION 40

38. About how much take home pay did he earn from working last month?
(PLEASE . . . *Do not include money from pension or welfare*)
(1)____ Earned little or no money from working last month
(2)____ Earned less than $100 per week
(3)____ Between $100 and $200 per week
(4)____ Over $200 per week from working

39. From working, did he earn an adequate amount of money last month?
(Mark one)
(1)____ Earned no money by working last month
(2)____ Earned enough to take care of his personal needs
(3)____ Earned enough to partially support a family
(4)____ Earned enough to adequately support a family

NOTE: QUESTIONS 40-48 ASK THAT YOU INDICATE WHETHER CERTAIN AREAS OF ADJUSTMENT CAUSED PROBLEMS FOR THE PERSON YOU ARE RATING DURING THE MONTH JUST BEFORE HE CAME FOR TREATMENT. BE SURE TO ANSWER EACH QUESTION BELOW

DURING THE PAST MONTH, HAS HE HAD PROBLEMS . . .

40 . . . Talking and relating to you and with people close to him?
(Mark one answer)
(1)____ No problems, (2)____ Some problems, (3)____ Serious problems

41 . . . Feeling bad about himself, angry with others? (Mark one)
(1)____ No problems, (2)____ Some problems, (3)____ Serious problems

42 . . . Being nervous, not sleeping or eating well? (Mark one)
(1)____ No problems, (2)____ Some problems, (3)____ Serious problems

43 . . . Forgetting things, being confused? (Mark one answer)
(1)____ No problems, (2)____ Some problems, (3)____ Serious problems

44 . . . Using alcohol or drugs to excess? (Mark one answer)
(1)____ No problems, (2)____ Some problems, (3)____ Serious problems

PLEASE GO ON TO PAGE 4

DURING THE PAST MONTH, HAS HE HAD PROBLEMS . . .

45 . . . Doing household chores, laundry, cooking, cleaning?
(0)_____ Not expected of him (2)_____ Some problems
(1)_____ No problems (3)_____ Serious problems

46 . . . Relating to children in the home? (Mark one answer)
(0)_____ No children in home (2)_____ Some problems
(1)_____ No problem (3)_____ Serious problems

47 . . . Getting involved in outside social activities, meetings?
(0)_____ Not expected of him (2)_____ Some problems
(1)_____ No problems (3)_____ Serious problems

48 . . . Earning money from working? (Mark one answer)
(0)_____ Not expected of him (2)_____ Some problems
(1)_____ No problems (3)_____ Serious problems

PLEASE COMPLETE THE FOLLOWING BACKGROUND QUESTIONS:

49. How often did you see this person during the month prior to treatment? (Mark one)
(1)_____ Haven't seen him during that month
(2)_____ Saw him once that month
(3)_____ About once a week
(4)_____ About 3 or 4 times a week
(5)_____ Saw him daily

50. What is your relationship to the person you are rating? (Mark one)
(1)_____ Wife
(2)_____ Parent
(3)_____ Other relative (sister, aunt, etc.)
(4)_____ Friend

51. Current marital status of person you are rating? (Mark one)
(1)_____ Never married
(2)_____ Currently separated, divorced, or widowed
(3)_____ Currently married and living with wife

52. How much education does this person have? (Mark one)
(1)_____ Didn't finish more than 8th grade
(2)_____ Some high school
(3)_____ High school graduate
(4)_____ Some college
(5)_____ College graduate

53. Total yearly income of household he lives in? (Mark one)
(1)_____ Under $8,000 per year
(2)_____ Over $8,000 per year

54. How long has he had the difficulty that requires treatment? (Mark one)
(1)_____ Had difficulty a few weeks or less
(2)_____ Had difficulty for several months
(3)_____ Had difficulty for 2 or more years

55. How much improvement do you expect to see in his adjustment after treatment? (Mark one)
(1)_____ Expect he will show little or no improvement after treatment
(2)_____ Expect he will show at least some improvement
(3)_____ Expect he will be much better than he is now
(4)_____ Expect he will be very well adjusted after treatment

56-57. Age of person you are rating _______________ age

IMPORTANT: Please check back and make sure you have answered each question. This is very important. When you have finished, put this form in the postage-free envelope and mail it to us as soon as possible.

Thank you very much for your help.

ADDITIONAL COMMENTS:

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Title: NURSING RATING SCALE (NRS)

Author: Hargreaves, William A.

Variable: Psychopathology as it can be described by the current behavior of acutely psychotic patients and patients undergoing a relatively brief hospitalization is the variable.

Description:

Nature and Content: This is a 24-item scale to be used by psychiatric nurses or technicians to describe symptoms and ward behavior of psychiatric patients. Each of the items is rated on a scale of from 0 to 9 to indicate the degree of severity or frequency of the symptom. The items are distributed as follows: Items 1–4 concern depression, items 5–8 concern anger, items 9–12 concern anxiety, items 13–16 concern thought disorders, items 17–20 concern interpersonal behavior, item 21 relates to motility, item 22 relates to talkativeness, items 23 and 24 ("contact with people" and "general functioning") are ratings of "effective" functioning rather than of the pathological behavior of the preceding items.

A rater's manual, available from the author, contains detailed guidelines for rating each of the items by providing descriptive statements illustrative of the several levels of behavior for each item within each group.

Administration and Scoring: As mentioned above, detailed guidelines for ratings are provided in the rater's manual. For the first 20 items, a zero rating means the particular behavior is definitely not present, 1–3 is in the low range, 4–6, moderate, and 7–9 is considered high.

For items 21 and 22, Motility and Talkativeness, ratings of 4–6 represent average functioning, while ratings either above or below this range represent deviations from the average. On items 23 and 24, the scale values are reversed so that the 0–3 range represents poor functioning, 4–6 fair, and 7–9 good functioning.

Hargreaves (1968) points out that "each rater should expect to give a 9 rating several times a year for every item. If necessary, the raters should agree to adjust the guidelines to match the patient population typically seen on a ward so that high ratings are frequently used."

Raters may use information reported to them by other staff members to supplement their own first-hand observations if such information will raise a patient's rating but *not* if it will lower it. This limitation is necessary because of the way in which psychopathology is expressed in behavior. An experienced rater can make daily ratings on 25 patients in approximately 30 minutes.

The NRS generates a large volume of data and requires rapid and continuing training and monitoring of interrater agreement. The following techniques have been successfully used in recording NRS data: (1) a card sorting method, (2) machine scored answer sheets, and (3) an automatic rating keyboard, which is considered superior to the foregoing methods in spite of its larger initial cost.

Development:

Rationale: The author indicates that no specific psychological theory underlies this instrument.

Source of Items: The items were based on a review of the literature and the professional experience of the author.

Procedure for Development: Hargreaves adopted the 24-item Bunney and Hamburg (1963) Scale as a starting point and used the following criteria during the 18-month development of his scale:

1. The scale must be short enough for daily use with a relatively large number of patients by several raters.
2. Items should have reasonable comparable interrater reliability. Items found consistently difficult to agree upon would be dropped.
3. Items should have roughly comparable variance. Any item rarely rated above zero would be dropped.
4. Items should cover several areas of patient behavior normally noted by a trained psychiatric nurse or technician. No general area of behavior would be represented by only one item.

Reliability and Validity: Hargreaves (1968) reported:

> It has been our observation that an experienced and skilled psychiatric nurse or technician usually attains a level of interrater agreement comparable to the average of our staff of psychiatrists within two months.

Factor analysis has indicated the presence of four factors related to anger, thought disorder, anxiety, and depression. Problems in the interpretation of this factor analysis are discussed in some detail by the author (1968).

The author suggests that since this scale is intended for longitudinal studies of individual patients, the items should show significant time trends in patients who are changing. He concludes from his data that the Nursing Rating

Scale does detect longitudinal trends in his sample of hospitalized patients.

Use in Research: The use of the NRS in a 6-month period during which ratings were made on a total of 2,396 patient-days is described in the Hargreaves references cited below.

Comments: The Rater's Guide provides clear, concise statements of the scoring criteria, and elaborate multivariate methods were used to detect trends in patient behavior identified through use of the instrument. The instrument has an inherent difficulty, as do most scales of its type, in that scoring is dependent upon the observational abilities of individual raters. To overcome unreliable ratings, the author emphasizes the need to select raters who demonstrate good reliability, the importance of an ongoing rating program, and the use of the Rater's Guide.

References:

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Hargreaves, William A. Systematic nursing observation of psychopathology. *Archives of General Psychiatry*, 1968, *18*, 518–531.

______. Methods for large scale recording of clinical ratings. *Journal of Psychiatric Research*, 1968, *6*, 169–174.

Source of Information:

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Langley Porter Institute
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San Francisco, Calif. 94143

Instrument Copyright: None.

Hargreaves, William A.

NURSING RATING SCALE (NRS)

Patient____________________
Date____________________
Rater____________________

DATE

JAN ☐ FEB ☐ MAR ☐ APR ☐ MAY ☐ JUN ☐ JUL ☐ AUG ☐ SEP ☐ OCT ☐ NOV ☐ DEC ☐ ☐

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐
16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30 ☐ 31 ☐

RATER

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐

PATIENT

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐
21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30 ☐ 31 ☐ 32 ☐ 33 ☐ 34 ☐ 35 ☐ 36 ☐ 37 ☐ 38 ☐ 39 ☐ 40 ☐

		LOW	MODERATE	HIGH
1. DEPRESSED TALK____	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
2. DEPRESSED MANNER____	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
3. PHYSICAL COMPLAINTS	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
4. DEPRESSION____________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		LOW	MODERATE	HIGH
5. ANGRY TALK__________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
6. ANGRY MANNER________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
7. UNCOOPERATIVE________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
8. ANGER______________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		LOW	MODERATE	HIGH
9. ANXIOUS TALK________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
10. ANXIOUS MANNER______	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
11. PACING AND WANDERING	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
12. ANXIETY____________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		LOW	MODERATE	HIGH
13. DISORDERED TALK_____	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
14. DELUSIONAL TALK_____	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
15. CRAZY MANNER_______	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
16. SUSPICIOUS OR PARANOID	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		LOW	MODERATE	HIGH
17. ASKS FOR HELP_______	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
18. NEEDS LIMITS________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
19 ALOOFNESS__________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
20. PREOCCUPATION_______	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		BELOW NORMAL	NORMAL	ABOVE NORMAL
21. MOTILITY___________	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
22. TALKATIVENESS_______	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

		POOR	FAIR	GOOD
23. CONTACT WITH PEOPLE	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐
24. GENERAL FUNCTIONING	0 ☐	1 ☐ 2 ☐ 3 ☐	4 ☐ 5 ☐ 6 ☐	7 ☐ 8 ☐ 9 ☐

1. DEPRESSED TALK: worthless, hopeless, guilty, suicidal, helpless

Low 1-3	Mentions these feelings once or twice during shift or only on direct questioning; patient need not refer to these feelings by name if the content of his talk clearly demonstrates them.
Mod 4-6	Volunteers or admits to these feelings in conversation.
High 7-9	A large proportion of his talk is about being unhappy, worthless, hopeless or guilty.

2. DEPRESSED MANNER: sad face, slumped body, self-destructive

Low 1-3	Slowed movements, sad looking, sad voice, or occasional teary-eyed.
Mod 4-6	Persistent dejected air; occasional crying.
High 7-9	Steady, persistent, extremely sad posture and expression; crying; suicidal gesture.
9	Serious suicide attempt.

3. PHYSICAL COMPLAINTS

Low 1-3	Occasional complaints.
Mod 4-6	Frequent complaints about real bodily ills, or exaggerates bodily ills.
High 7-9	Frequent and obviously unrealistic complaints about bodily ills; talk suggests somatic delusions.
9	Clear expression of somatic delusions.

4. DEPRESSION

Overall rating:

This is the place where the rater can utilize the previous depression items plus other aspects of the patient's behavior to give an overall rating for depression. The detailed items will help to bring to mind the various ways depression can be expressed, but there may be other aspects of patient behavior which indicate depression. In most cases, the overall rating will be in the same range as the *higher* of either the talk or manner item. But it might be *lower* if you think the particular talk or manner is a sham, or higher if you can point to other behavior which indicates more intense depression, but does not fit specifically into "depressed talk" or "depressed manner."

5. ANGRY TALK: grumpy, resentful, sarcastic, abusive

Low 1-3	Occasionally sarcastic, snappish, grumpy, demanding.
Mod 4-6	An angry outburst; outspokenly annoyed several times during the day, or persistently grumbling or sarcastic.
High 7-9	Verbally assaultive or abusive more than once during the day or a large proportion of his talk is intensely angry; the person who is target of anger need not be present.

6. ANGRY MANNER: annoyed face, threatening posture, striking another

Low 1-3	Annoyed facial expression; sullen; brusque or abrupt in interpersonal contacts.
Mod 4-6	Occasional intense, glaring, threatening expression, or moderate angry expression throughout the shift; slamming around, kicking or banging objects; noisy but non-destructive.
High 7-9	Threatening expression for several hours; hits or grapples with another person; destroys property.
9	Serious destruction of property or physical attack on another.

7. UNCOOPERATIVE: stubborn, verbally resistive, physically resistive

Low 1-3	Avoiding obligations; failure to live up to established contracts; mild stubbornness; resistive though claims willingness.
Mod 4-6	Failure to follow orders; verbally resistive, or sullenly defiant.

High 7-9	Physically refusing to conform to staff requests; physically resistive.

8. Anger

Overall rating:

The guidelines on overall ratings under item 4 apply also to this item.

9. Anxious talk: worries, talks fearfully

Low 1-3	Mentions being anxious once or twice during shift or only on direct questioning—does not volunteer anxious talk; patient need not refer to fear or anxiety by name if the content of what he says clearly demonstrates it.
Mod 4-6	Occasionally talks about these feelings; worries about little difficulties; fearfully asks for reassurance; volunteers anxious talk.
High 7-9	A large proportion of his talk is about being anxious, fearful, or worried; insists on anxious talk.

10. Anxious Manner: tense, jumpy, panicked

Low 1-3	Somewhat tense; occasionally appears anxious or fearful; shy; anxious quaver in voice.
Mod 4-6	Tortured expression or mild tremor; distinct muscular tension; occasional startled or fearful expression.
High 7-9	Continuously agitated, hand-wringing, fearfully hiding, startling, gross tremor.

11. Pacing or Wandering

Low 1-3	Occasional restlessness.
Mod 4-6	Pacing or wandering part of the time.
High 7-9	Aimless wandering around ward all day, or pacing continuously back and forth in same area; very restless.

12. Anxiety

Overall rating:

The guidelines on overall ratings under item 4 also apply to this item.

13. Disordered Talk: loose, rambling, incoherent

Low 1-3	Talk is a little hard to follow; rambles.
Mod 4-6	Talk is hard to follow: easily distracted, subject changes, loose associations; cannot get his ideas out, as if thoughts come too fast.
High 7-9	Occasionally emits completely incoherent sentences; unconnected talk with grammer all mixed up; very loose or tangential associations; severe blocking; frequently retracts statements or immediately contradicts himself.

14. Delusional Talk: odd ideas, delusions or hallucinations

Low 1-3	Odd ideas, unclear statements; strange ideas which raise question of delusions; ideas or interests not themselves delusional but closely related to former delusions.
Mod 4-6	Suffers from delusions but is not completely in their grip; may report hallucinations but doubts their reality.
High 7-9	Content of talk is at times clearly delusional; ideas of persecution, somatic delusions; delusions of grandeur, and delusions of absolute guilt; misidentifying persons, places or things; reports hallucinations.

15. Crazy Manner: peculiarities, symbolic gestures, posturing

Low 1-3	Minor peculiarities; eccentric behavior which does not clearly indicate thought disorder; person seems "odd" but his nonverbal behavior would not ordinarily cause him to be hospitalized or to be seen as crazy by the average person.
Mod 4-6	Nonverbal behavior which clearly indicates thought disorder, but does not dominate or severely disrupt his functioning: wears inappropriate clothes; collects or carries around small objects; moderately catatonic; very indecisive; occasional bizarre or symbolic gesture or posture.

High 7-9	Posturing; extreme catatonic rigidity; undressing; bizarre costuming; smearing; behavior suggests hallucinations.
9	Clearly behaves as if hallucinating, even if only once.

16. SUSPICIOUS OR PARANOID

Low 1-3	Some suspiciousness, but no sign of paranoid delusions.
Mod 4-6	Suspicious talk but no direct admission of delusions; glancing around suspiciously; refuses food without admitting suspiciousness of being poisoned.
High 7-9	Verbalizes paranoid delusions occasionally, or if questioned.
9	Verbalizes paranoid delusions spontaneously.

17. ASKS FOR HELP: demanding, clinging

Low 1-3	Seeks occasional reassurance by asking others to make small decisions for him, or by asking trivial questions.
Mod 4-6	Often asks for help or reassurance; asks others to make important decisions for him; continuous *indirect* asking for help.
High 7-9	Verbally demanding or physically clinging; continuous *direct* requests for help.

18. NEEDS LIMITS: teasing, breaking rules, anti-social behavior

Low 1-3	Mild limit testing, teasing; needs only minimal verbal limits, e.g., "knock it off."
Mod 4-6	Requires explicit, firm controls verbally, and responds to them.
High 7-9	Requires physical controls; PRN tranquilizers for control.
9	Seclusion required at least once for control.

(Do not rate here the lack of behavior which may lead the staff to motivate the patient or structure his activities.)

19. ALOOFNESS: remains alone, withdraws, unapproachable

Low 1-3	Tends not to get involved with others; may simply wish to be by himself, but responds to others' approach.
Mod 4-6	Avoids involvement much of the time, or with selected people, e.g., being aloof from staff but not from other patients; aloofness *may* be expressed primarily in passive withdrawal.
High 7-9	Actively avoids contact or involvement with everyone; does not answer, turns away, leaves the room; at high levels the patient must be exerting considerable effort to avoid being involved.

20. PREOCCUPATION: persistent thinking activity which replaces or interferes with appropriate attention to persons and events in the here and now

Low 1-3	Stares off into space or daydreams part of the time, but has no difficulty attending when involved in an activity or in conversation.
Mod 4-6	Stares off into space when left alone but attends fairly well to conversation when approached; or, generally participates in surrounding activities but "drifts off" or loses the flow of conversation occasionally.
High 7-9	Stares off into space all the time; or if talking, is limited to one or a very few topics.

MOTILITY AND TALKATIVENESS

These two items are different from the preceding ones, in that normal variation in behavior is rated in the middle range of the scale, instead of in the low range. Avoid a rating of 5 if the patient is even slightly slower or faster than usual. Ratings of 3 or 7 may be normal for some individuals and do not necessarily indicate pathology.

21. MOTILITY: retarded to average (4-6) to hyperactive

0	Completely immobilized, never moving unless staff insists.
1	Severely retarded, frozen, or catatonic.
2-3	Noticeably slower than is average for most people.
4-6	Normal daily fluctuations in an average person's motility.

7-8	Enough activity that it is noticeably greater than average for most people.
9	Manic excitement; nearly constant physical activity.

22. TALKATIVENESS: mute to average (4-6) to constant chatter

0	Mute; does not talk.
1	Little talk; single word answers.
2-3	Quiet; doesn't waste words; prefers not to initiate contacts.
4-6	Talks about as much as an average person.
7-8	Gregarious; likes to initiate contacts with others.
9	Constantly talking; unable to stop.

EFFECTIVE FUNCTIONING

The scale for items 23 and 24 is reversed from the one used for items 1-20. Ratings of 0-3 represent very poor, ineffective functioning, while 4-6 is fair, and 7-9 is good enough to be discharged and to handle his own affairs fairly well. Remember that 9 means good functioning in a person who has needed hospitalization in the past. Even a 9 rating includes people functioning a bit poorer than the average person of his age, education, etc.

23. EFFECTIVE CONTACT WITH PEOPLE: reality, honesty, warmth

Poor 0-3	Conversation, doing tasks, playing games, or just being with other people is characterized by aloofness, quarreling, tension, coldness, unrealistic dependency.
Fair 4-7	Engagement is partial and sporadic; less aloofness, more realistic expression of feelings; difficulty being direct; awkward but trying.
Good 7-9	Is able to show through deeds and words some concern for other people; works, plays, talks with others successfully; is relatively direct; interpersonal frictions are resolved almost as well as the average nonpatient.

24. EFFECTIVE GENERAL FUNCTIONING

Poor, fair, and good ranges are determined by the patient's ability to perform the type of functions shown.

Poor 0-3	Feed self without assistance; keep his clothing appropriate without assistance; make his bed by himself; wash face, take shower without supervision; stay in an exercise group and follow the exercises; wash his clothes without help; remain in O.T. and gym; stay with group on outings; be aware of the score in games played at gym. Even if he can do all these things, rate no higher than 3 if you feel the patient probably could not minimally care for himself all-day alone.
Fair 4-6	Groom himself appropriately; stay with tasks on the ward; participate effectively in O.T.; carry out cooking project with others; participate sensibly in activities planning meeting; handle building passes with another patient; initiate and plan a project in O.T. on his own.
Good 7-9	Function adequately in volunteer work; handle unaccompanied passes away from the hospital; successfully manage home visits; look sincerely for work or perform a job; plan realistically for discharge.

Title: PEDIATRIC BEHAVIORAL QUESTIONNAIRE

Authors: Tasem, Walter M, Dasteel, Joan C., and Goldenberg, Erwin D.

Variable: A child's behavioral characteristics which a parent perceives as an important problem is the variable studied.

Description:

Nature and Content: This is a self-administered, 28-item questionnaire designed for psychiatric screening, i.e., to uncover common behavioral problems in age-related developmental sequence (Tasem et al., 1974). Parents are asked to check "yes" in the space provided for any item they feel is a serious problem for their child and "no" for any item they feel is not a serious problem for their child. Included are such items as eating, sleeping, bowel problems, bed-wetting, speech, discipline, sex behavior and education, extreme dependency or independence, recurrent physical complaints, size, alcohol, drugs, etc. The questionnaire is available in both Spanish and English. Space is also provided to report the presence of problems or concerns not listed on the instrument.

Administration and Scoring: The instrument was designed to be completed by parents during initial screening interviews in a pediatrician's office or a pediatric facility. Instructions for completion are on the form, and respondents are urged to answer all questions. The authors state in the instructions that "several do not apply to all ages." It is estimated that the instrument could be completed in approximately 5 minutes though no time limits are imposed. The authors did not score the instrument per se. Scoring procedures will be dependent upon the needs and purposes of the investigator.

Development:

Rationale: Delegation of certain medical-related tasks by physicians to allied health personnel has been widely proposed and sometimes adopted as a means of expanding pediatric manpower and improving the quality and quantity of pediatric care (Tasem et al., 1974). Early detection of emotional and behavioral disturbances in patients seen in a department of pediatrics was the motive for developing a psychiatric screening program; this instrument was developed for use by allied health personnel in that screening program to help identify parents' concern about their children.

Source of Items: The items were based upon the professional experience of the authors.

Procedure for Development: No information was provided.

Reliability and Validity: No information was provided.

Use in Research: The instrument was used in a survey research study conducted by Tasem, Dasteel, and Goldenberg in the Department of Pediatrics, Southern California Permanente Medical Group and Kaiser Foundation Hospitals, Los Angeles. The patients were 2,022 children ages 4 to 14 years. On the basis of data collected using the instrument, 1,540 parents reported problems and 622 parents reported no problems.

In a followup interview of 1,137 parents reporting problems, 13 percent stated the problem was resolved, 59 percent required reassurance, 7 percent needed further medical work-up or another interview, and 16 percent were referred to a mental health facility.

Comments: This instrument was designed to be used by pediatric aides for the purpose of identifying those parents willing to report their child as having an important behavioral problem. Then, a social worker talked in person or on the telephone with the parents to determine the existence and nature of the problem and the disposition of the case, e.g., reassurance, advice, or referral to a mental health facility.

The items on the questionnaire concern general classes or areas of behavior rather than specific behaviors. A few items include more than one class or area. Consequently, the specific meaning of any response is unclear without a subsequent interview. Any potential user should note that in its present form, the instrument leads to a simple tabulation of data, and its psychometric properties are, as yet, untested.

References:

Tasem, Walter M., Dasteel, Joan C., and Goldenberg, Erwin D. Psychiatric screening and brief intervention in a pediatric program utilizing allied health personnel. *Journal of Orthopsychiatry*, 1974, *44* (4), 568–578.

Source of Information:

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Instrument Copyright: None.

Tasem, Walter M., Dasteel, Joan C., and Goldenberg, Erwin D.

PEDIATRIC BEHAVIORAL QUESTIONNAIRE

Please check "YES" to any of the following which you feel may be an IMPORTANT PROBLEM for your child. Please ANSWER ALL QUESTIONS (We know several do not apply to all ages). If other problems are present, please describe briefly below, (after "other").

	NO	YES
1. Eating (include weight problems)	___	___
2. Sleep problems (include nightmares, sleep-walking, etc.)	___	___
3. Bowel problems (include constipation, soiling, recurrent diarrhea).	___	___
4. Toilet training.	___	___
5. Bed-wetting.	___	___
6. Day time wetting.	___	___
7. Speech.	___	___
8. School problems.	___	___
9. Developmental progress for age.	___	___
10. Ability to get along with others.	___	___
11. Discipline, obedience.	___	___
12. Temper tantrums.	___	___
13. Sex behavior and education.	___	___
14. Need for attention.	___	___

	NO	YES
15. High strung; easily upset.	___	___
16. Overactive; restless.	___	___
17. Excessive fears.	___	___
18. Extreme jealousy.	___	___
19. Extreme stubbornness.	___	___
20. Extreme destructiveness.	___	___
21. Extreme dependency or independence.	___	___
22. Nervous habits (eye blinking, grimacing, etc.)	___	___
23. Recurrent physical complaints (headache, pain, etc.)	___	___
24. Posture.	___	___
25. Size.	___	___
26. Tobacco.	___	___
27. Alcohol.	___	___
28. Drugs.	___	___

OTHER ____

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Title: WASHINGTON SYMPTOM CHECKLIST (WSCL)

Author: Wimberger, Herbert C., and Gregory, Robert J.

Variables: The variables are parents' perceptions of the behavior of a child for whom the parent seeks professional psychiatric help and the parents' motivation in seeking that help.

Description:

Nature and Content: The checklist consists of three sections. Section one contains 66 behavior symptoms of children commonly reported by parents seeking help in a child psychiatry clinic. Some of the items are reverse-worded. Each item is checked as occurring "never," "seldom," "frequently," or "very often."

Section two contains five questions designed to assess parental motivation in seeking professional help. Response choices for these items are yes, undecided, or no.

The final section contains four open-ended questions designed to further assess parental motivation in seeking help and the existence of psychopathology in the child.

Administration and Scoring: The first part of the WSCL can be completed by any literate person who knows the child well. Preferably, each parent completes an entire questionnaire (resulting in two completed instruments for each child, if both parents are present) under supervision in the clinic just prior to the intake interview. Parents take an average of 15 to 20 minutes to complete the WSCL.

A total score may be assigned to each completed WSCL by summing scores for the first 66 items. Items are scored 0 (never) through 3 (very often) for items indicating the presence of pathology and vice versa for items indicating the absence of pathology. The positively worded questions (Items 1, 8, 26, 27, 45) are scored in reverse. A high total score indicates both a greater number of symptoms and a greater severity of symptoms.

No information on the scoring or categorization of the remaining items was provided.

Development:

Rationale: Clinicians generally agree that clinical improvement correlates to a higher degree with the disappearance of symptoms than with any other trait. Predicated on the assumption that the number and degree of symptoms are directly related to the extent of emotional disturbance, the WSCL represents a pragmatic attempt to devise a behavior rating scale in terms of parents' report of their child's symptoms. Although parents are neither trained nor detached observers, they are usually the person with the most knowledge about the behavior of their child.

Source of Items: The WSCL consists of items derived primarily from the verbal complaints of parents seeking help in a child psychiatry setting.

Procedure for Development: No details were provided.

Reliability and Validity: Test-retest reliability of the first part of the WSCL was evaluated for a group of 40 children referred to a clinic for treatment and a second group of 40 nonclinic children. In both cases, parents completed the WSCL under supervision and then completed a second WSCL 30 days later. Neither group had any clinic contact during this period. For the clinic group, 66 parents of 40 children showed a correlation (Pearson r) of 0.84 between the two administrations; for the nonclinic group, 74 parents of 40 children showed a correlation of 0.87 between test and retest.

The validity of the first part of the instrument was studied by comparing WSCLs from parents of children undergoing treatment with WSCLs obtained from the child's therapist. Twenty-two sets of parent-therapist ratings were analyzed. For each of the 66 items, a measure of agreement was obtained by subtracting the parent's score from the therapist's score. These observed discrepancies were compared to the expected discrepancies obtained by assuming that the ratings of parent and therapist were independent. A Chi-square analysis indicated that the hypothesis of independence was rejected ($p < 0.001$).

Use in Research: Wimberger and Millar (1968) conducted a study in which the child behavior before a clinic intake interview was compared with his(her) behavior 30 days later by the use of the WSCL. The purpose of this project was to measure the effect of a single, initial interview on a child psychiatry patient as compared to a similar control group receiving no treatment. A significant trend toward a lessening of symptoms appeared for the clinic group, while the control group showed a slight increase in symptomatology (Wimberger and Gregory, 1968). The size of this sample was not indicated.

Comments: The first part of the WSCL has considerable face validity and demonstrated test-retest reliability; the second part provides valuable adjunctive information for clinical and research purposes. Future work should focus on a more extensive assessment of parent-parent and parent-therapist interrater reliability and should continue the authors' work in the instrument's discriminant validity.

The WSCL provides relatively quick access to the types of behavior problems present in the child, as well as information about the family's motivation and attitude toward psychiatric intervention. As the authors suggest, the instrument gives parents an opportunity to address problems they may be reluctant to discuss initially (Wimberger and Gregory, 1968).

An important unanswered question is the relationship between scores obtained using this instrument and scores of the severity of emotional disturbance in the child obtained by other means.

References:

Wimberger, Herbert C., and Gregory, Robert J. A behavior checklist for use in child psychiatry clinics. *Journal of the American Academy of Child Psychiatry*, 1968, 7, 677–688.

Wimberger, H., and Millar, G. The therapeutic effect of the initial clinic contact in child psychiatry patients. In S. Lesse (Ed.), *An evaluation of the results of the psychotherapies.* Springfield, Illinois: Thomas, 1968.

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Instrument Copyright:

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New York, N.Y. 10016

Winberger, Herbert C., and Gregory, Robert J.

WASHINGTON SYMPTOM CHECKLIST (WSCL)

The parent is asked to fill out the name, age, sex, and school grade of the child, and to give his own name and age. The items 1 - 66 listed below are followed by boxes in which the parent is asked to check "Very Often," "Frequently," "Seldom," and "Never." Items 68 - 72 are followed by boxes in which the parent is asked to check "Yes," "Undecided," and "No." Items 67 and 73 - 76, being open-ended questions, are followed by empty spaces.

INSTRUCTIONS: The answers to the following questions will help us to understand the problems of your child. Please compare him/her with his/her friends or other children you know when filling in the answers. Mark your first thought. Do not deliberate. Please answer the questions considering the behavior of your child during the last month. Questions marked with an asterisk (*) are regarding your child's whole life, and they should be answered with this in mind.

1. Has interests or hobbies
2. Has trouble reading
3. Has serious fights with other children
4. Has temper tantrums
5. Forgets things
6. Is easily led by others
7. Disobeys father
8. Is understanding of other people's feelings
9. Refuses to share
10. Daydreams
11. Is inattentive in school
12. Has difficulty in finishing a task he/she starts
13. Shows jealousy
14. Gets hurt in accidents
15. Feels unhappy
16. Is shy
17. Angers easily
18. Disobeys mother
19. Has difficulties with teachers
20. Takes things that are not his/hers
21. Demands a great deal of attention

22. Shows immature behavior
23. Misbehaves at home
24. Is a discipline problem at school
25. Blames others for his troubles
26. Is self-sufficient
27. Is cooperative and follows directions
28. Prefers to play alone
29. Pouts or sulks when told to do something
30. Has difficulty making grades in school
31. His/her feelings are easily hurt
32. Doesn't tell the truth
33. Is unpopular with other children
34. Refuses food
35. Talks back to parents
36. *Has been held back a grade in school
37. Lacks self-confidence
38. *Has been in trouble with Juvenile Authorities
39. Has sleeping disturbances
40. Prefers to play with children not his/her own age
41. Cries easily
42. Refuses parental instructions
43. Gets along poorly with children of opposite sex
44. Is irritable
45. Gets along well with grownups
46. Has speech difficulty
47. Gets along poorly with brothers and sisters
48. Is resentful of discipline
49. Teases others
50. Is fearful
51. Is stubborn
52. Is nervous and jumpy
58. Is bossy
54. Is destructive
55. Is overactive
56. Is afraid to defend herself/himself
57. Has physical complaints
58. Wets bed
59. Sucks thumb
60. Bites nails
61. Masturbates
62. Shows unusual interest in fires
63. Has a tic (nervous twitch)
64. Does not show feelings
65. Is concerned about neatness
66. Complains about going to school
67. Other problems not listed:

The next nine questions are directed to you, as the child's parent. They may not be exactly appropriate to your special situation, but please answer them to the best of your ability.

68. Do you think that your child has an emotional problem?
69. Does it embarrass you that your child has emotional problems?
70. Does your wife/husband agree that there are problems?
71. Do you feel in part responsible for your child's problems?
72. Do you feel that your child will outgrow the problem?
73. As the child's parent, what concerns you most about him/her?
74. At this point what solutions to your difficulties have you considered?
75. Do you feel that our professional help will assist you?
76. Who originated the idea of coming to the clinic?

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Client Physical Health Status

Title: ORAL ASSESSMENT GUIDE

Author: De Walt, Evelyn M.

Variables: The instrument was designed to assess nine variables: (1) salivation, (2) tongue moisture, (3) tongue color, (4) moisture of palates, (5) condition of gingival tissue, (6) color of the membranes, (7) lip texture, (8) lip moisture, and (9) soft tooth debris.

Description:

Nature and Content: The instrument is a set of nine fully scored, 3-point rating scales—one for each variable. Each of the 3 points on the rating scale is provided with descriptors that assist the rater in making the ratings. The range of the scale is from 1 (undesirable oral tissue condition) to 3 (most desirable oral tissue condition).

Administration and Scoring: Using the materials, methods, and criteria specified in the instrument, the rater assesses and rates each of the nine variables for each subject. No other specifications for scoring were provided.

Development:

Rationale: The state of oral health can be determined by a series of observations done according to professional dental directions. This instrument was constructed as an explicit guide for such observations.

Source of Items: The items for the guide were adapted from an instrument developed for the study of Passos and Brand (1966). The Passos and Brand study instrument was based upon information contained in an article by Greene and Vermillion (1960).

Procedure for Development: With the assistance of dental consultation, the author adapted the guide from the Passos and Brand study. A pilot study involving 40 subjects was conducted by the author and her assistant to determine interrater reliability.

Reliability and Validity: Interrater reliability of 0.92 was obtained on the pilot study; however, the author did not indicate whether this was the reliability for all nine variables or one variable alone. Although no figures are reported for test-retest reliability, data are reported from which this can be inferred (Dewalt, 1975).

Content validity was established by having the instrument reviewed by dentists at Ohio State University and the University of Arizona.

Construct validity was established by factor analyzing pilot data which appeared to have an identifiable dimension.

Use in Research: This instrument was used by DeWalt in a study conducted to identify and compare the effects on oral mucosa when oral hygiene was performed using a toothette versus a toothbrush at 2, 3, and 4-hour intervals during an 8-hour period for 10 days.

The study sample consisted of 48 geriatric patients randomly selected from an extended care facility. These patients were unable to perform their own oral care and were willing to participate in the study.

Comments: The method of assessment, the numerical ratings, and the descriptive ratings are clear and would seem to be easy to understand. However, the author's study would seem to indicate that it is difficult to assign numbers to some of these variables unless the condition is in the direction of either extreme, i.e., 1 or 3.

The author's factor analysis having identified only one factor indicates that the variables are highly related and that one variable, amount of salivation, determines all other variables' measurement.

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DeWalt, Evelyn M.

ORAL ASSESSMENT GUIDE

DEPENDENT VARIABLE	TOOLS FOR DATA COLLECTION	METHOD OF MEASUREMENT	NUMERICAL AND DESCRIPTIVE RATINGS		
			1	2	3
Salivation	Tongue blade	Insert blade into mouth, touching gums, palates, and floor of mouth. Slowly remove and observe	Ropy of viscid	Dry or scanty	Moist
Tongue moisture	Visual and palpitory assessment	Feel and observe appearance of tissue	Coated	Dry	Moist
Tongue coloring	Visual assessment	Observe appearance of tissue	Red and blistered	Red	Pink
Palates	Visual assessment	Observe appearance of tissue	Dry and coated with debris	Dry	Moist
Gingival tissue	Tongue blade and visual assessment	Gently press tissue with tip of blade	Red, shiny, edematous, bleeding	Red, shiny edematour	Pink and resilient
Membranes (palates, uvula, and tonsillar fossa)	Visual assessment	Observe appearance of tissue	Red with general inflammation (includes two of the membranes)	Red with local inflammation (includes one of the membranes)	Pink
Lip texture	Visual and palpitory assessment	Observe and feel tissue	Rough, large amount of debris	Rough, small amount of debris	Smooth and soft
Lip moisture	Visual and palpitory assessment	Observe and feel appearance of tissue	Cracked or bleeding	Dry	Moist
Soft tooth debris	Disclosing solution	Applied by applicator stick to all tooth surfaces. Acts as dye which penetrates the invisible foreign material clinging to teeth. For purposes of scoring the total amount of tooth debris was computed according to an index developed by Greene and Vermillion (1971)	Soft debris covers more than 2/3 total teeth surface	Soft debris covers 1/3, but less than 2/3 total teeth surface	Debris less than 1/3 or edentulous

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Title: GESTATIONAL AGE IN THE NEWBORN INFANT

Authors: Dubowitz, Lilly M.S., Dubowitz, Victor, and Goldberg, Cissie

Variable: The instrument assesses the gestational age of a newborn infant on the basis of 10 neurologic and 11 "external" criteria. The neurologic criteria are: posture, square window, ankle dorsiflexion, arm recoil, leg recoil, popliteal angle, heel to ear, scarf sign, head lag, and ventral suspension. The external criteria are: skin texture, skin color, skin opacity, edema, lanugo, ear form, ear firmness, genitals, breast size, nipple formation, and plantar skin creases.

Description:

Nature and Content: This is a 21-item observation guide that can be used to clinically assess the gestational age of a newborn infant. It is divided into the two sections identified above under *Variable.* Section 1 pertains to the neurologic assessment and consists of a stick-figure representation for each grade of each sign and the score to be assigned for each of these. The section is accompanied by descriptive "Notes on Techniques of Assessment of Neurologic Criteria" which describe the procedure for testing the infant for each sign. Section 2 pertains to the external signs to be assessed and consists of verbal descriptions for each point on the rating scale for each sign. For both sections the number of grades which may be assigned varies according to the sign being assessed, i.e., for some, one of three possible grades may be assigned, for others, one of four or one of five possible grades, and for popliteal angle, one of six possible grades may be assigned.

Neurologic criteria

Criterion	Score
Posture	0 - 4
Square window	0 - 4
Dorsiflexion of foot	0 - 4
Arm recoil	0 - 2
Leg recoil	0 - 2
Popliteal angle	0 - 5
Heel to ear	0 - 4
Scarf sign	0 - 3
Head lag	0 - 3
Ventral suspension	0 - 4
Total	0 - 35

External criteria

	Score
Edema	0 - 2
Skin texture	0 - 4
Skin color	0 - 3
Skin opacity	0 - 4
Lanugo	0 - 4
Plantar creases	0 - 4
Nipple formation	0 - 3
Breast size	0 - 3
Ear form	0 - 3
Ear firmness	0 - 3
Genitals	0 - 2
Total	0 - 35

Administration and Scoring: The assessment should be completed by a health care professional who is proficient in conducting pediatric examinations and who is familiar with the instrument. In the study reported by Dubowitz, Dubowitz, and, Goldberg (1970), the assessments were conducted "on the obstetric landings and in the Special Care Unit and Premature Nursery . . . . All assessments were made within 5 days of delivery; in a large proportion the first assessment was made within 24 hours (of birth)." The authors report that the whole procedure, once one becomes familiar with it, requires approximately 10 minutes.

If scores on the right and left sides differ, a mean score is used for that particular sign. Scores for each sign are summed to provide a total score for each infant. Total possible scores range from 0, which is compatible with the posture or state of the reflex of the immature infant, to 70. Total scores can be equated to estimation of gestational age in weeks by reference to a graph (Dubowitz et al., 1970, p. 9).

Development:

Rationale: Interest in the assessment of the gestational age in the newborn infant and in differentiating the short-gestation infant from the small-for-date infant has increased in recent years. These interests have fallen, mainly, into two broad groups—a series of neurologic signs, and a series of external characteristics. The authors of this instrument were interested in developing one which would include both neurologic and external characteristics, would have an objective scoring system, and would be more accurate than trying to assess the gestational age on the presence or absence of individual neurologic or external signs (Dubowitz et al., 1970).

Source of Items: The items were based upon the professional experience of the authors, a review of literature, and the work of other professionals in the field, especially Koenigsberger (1966), Amiel-Tison (1968), Robinson (1966), and Farr and Associates (1966).

Procedure for Development: The authors conducted a pilot study using all of the neurologic criteria defined by Koenigsberger, Amiel-Tison, and Robinson. Based upon the results of the pilot study, a series of neurologic criteria were selected, i.e., they were easily definable and were least influenced by the state of the baby or the presence of neurologic abnormality. At this time, it was also decided to score each neurologic sign along the lines used by Farr and Associates for scoring external characteristics. In parallel with this, the authors also used the criteria for external characteristics defined by Farr and Associates (Dubowitz et al., 1970).

The instrument was then used for a survey of 167 infants in the Jessop Hospital for Women, Sheffield, England (Dubowitz et al., 1970).

Reliability and Validity: An observer who had no knowledge of the delivery dates used the instrument to assess 167 infants. After completion of that initial survey, three pediatricians practiced using the scoring system on a number of infants. Following that, the three pediatricians assessed 9, 10, and 130, respectively, of the same infants assessed by the initial single observer. The Student's t-test of the differences between the scores obtained by the original observer and the three pediatricians showed no significant differences. The scores obtained by three nurses were then compared with those obtained by the original observer on some of the same infants (11 7, and 11 infants, respectively, for the three nurses). The Student's t-test showed no significant differences between the scores obtained by the original observer and two of the three nurses, but, the third nurse consistently scored each infant 5 points higher than the original observer. None of the three nurses had had any previous experience with the instrument or method.

Validity for the instrument is evidenced by the following: the correlation coefficient of the scores obtained by the initial observer against the gestational age of the 167 infants based upon data obtained from the mothers was 0.93. The error of prediction of a single score based on these data was 1.02 weeks and 95 percent confidence limits were plus or minus 2 weeks. When two independent assessments were done on the same infant, the error of prediction of the average of the two readings was 0.7 weeks, and the 95 percent confidence limits were plus or minus 1.4 weeks. The correlation coefficient of the external criteria against gestation was 0.91 percent and of the neurologic criteria against gestation was 0.89. The corresponding 95 percent confidence limits of the single score on external criteria were 2.4 weeks and on the neurologic criteria were 2.6 weeks.

Use in Research: The instrument has been widely used by the authors in their research in England and by researchers in this country.

Comments: The instrument has much to commend it. The criteria are clearly defined, easily identified and observed; the scoring system is clear, comprehensive, and can be readily learned; the evidence of interrater reliability and validity, though limited, is promising.

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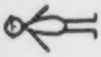
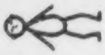
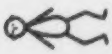
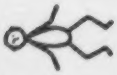
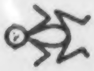
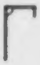
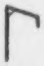
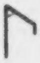
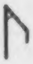
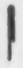
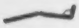
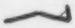
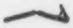
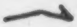
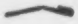
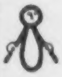
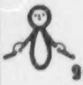
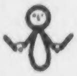
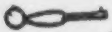
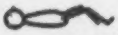
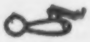
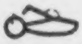
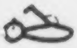
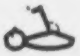
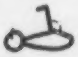
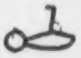
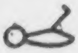
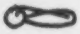
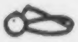
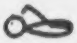
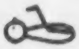
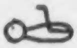
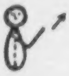
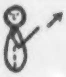
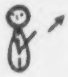
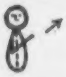
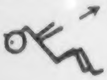
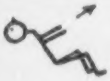
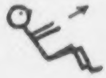
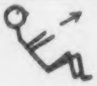
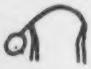
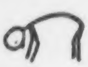
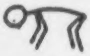
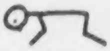
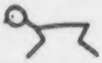
Dubowitz, Lilly M.S., Dubowitz, Victor, and Goldberg, Cissie

GESTATIONAL AGE IN THE NEWBORN INFANT

NEUROLOGICAL SIGN	SCORE					
	0	1	2	3	4	5
POSTURE						
SQUARE WINDOW	 90°	 60°	 45°	 30°	 0°	
ANKLE DORSIFLEXION	 90°	 75°	 45°	 20°	 0°	
ARM RECOIL	 180°	 90-180°	 <90°			
LEG RECOIL	 180°	 90-180°	 <90°			
POPLITEAL ANGLE	 180	 160°	 130°	 110°	 90°	 <90°
HEEL TO EAR						
SCARF SIGN						
HEAD LAG						
VENTRAL SUSPENSION						

SOME NOTES ON TECHNIQUES OF ASSESSMENT OF NEUROLOGIC CRITERIA

POSTURE: Observed with infant quiet and in supine position. Score 0: Arms and legs extended; 1: beginning of flexion of hips and knees, arms extended; 2: stronger flexion of legs, arms extended; 3: arms slightly flexed, legs flexed and abducted; 4: full flexion of arms and legs.

SQUARE WINDOW: The hand is flexed on the forearm between the thumb and index finger of the examiner (Fig. 3). Enough pressure is applied to get as full a flexion as possible, and the angle between the hypothenar eminence and the ventral aspect of the forearm is measured and graded according to diagram. (Care is taken not to rotate the infant's wrist while doing this maneuver.)

ANKLE DORSIFLEXION: The foot is dorsiflexed onto the anterior aspect of the leg, with the examiner's thumb on the sole of the foot and other fingers behind the leg (Fig. 4). Enough pressure is applied to get as full flexion as possible, and the angle between the dorsum of the foot and the anterior aspect of the leg is measured.

ARM RECOIL: With the infant in the supine position the forearms are first flexed for 5 seconds, then fully extended by pulling on the hands, and then released. The sign is fully positive if the arms return briskly to full flexion (Score 2). If the arms return to incomplete flexion or the response is sluggish it is graded as Score 1. If they remain extended or are only followed by random movements the score is 0.

LEG RECOIL: With the infant supine, the hips and knees are fully flexed for 5 seconds, then extended by traction on the feet, and released. A maximal response is one of full flexion of the hips and knees (Score 2). A partial flexion scores 1, and minimal or no movement scores 0.

POPLITEAL ANGLE: With the infant supine and his pelvis flat on the examining couch, the thigh is held in the knee-chest position by the examiner's left index finger and thumb supporting the knee. The leg is then extended by gentle pressure from the examiner's right index finger behind the ankle and the popliteal angle is measured (Fig. 5).

HEEL TO EAR MANEUVER: With the baby supine, draw the baby's foot as near to the head as it will go without forcing it. Observe the distance between the foot and the head as well as the degree of extension at the knee. Grade according to diagram. Note that the knee is left free and may draw down alongside the abdomen (Fig. 6).

SCARF SIGN: With the baby supine, take the infant's hand and try to put it around the neck and as far posteriorly as possible around the opposite shoulder. Assist this maneuver by lifting the elbow across the body. See how far the elbow will go across and grade according to illustrations. Score 0: Elbow reaches opposite axillary line; 1: Elbow between midline and opposite axillary line; 2: Elbow reaches midline; 3: Elbow will not reach midline.

HEAD LAG: With the baby lying supine, grasp the hands (or the arms if a very small infant) and pull him slowly towards the sitting position. Observe the position of the head in relation to the trunk and grade accordingly. In a small infant the head may initially be supported by one hand. Score 0: Complete lag; 1: Partial head control; 2: Able to maintain head in line with body; 3: Brings head anterior to body.

VENTRAL SUSPENSION: The infant is suspended in the prone position, with examiner's hand under the infant's chest (one hand in a small infant, two in a large infant). Observe the degree of extension of the back and the amount of flexion of the arms and legs. Also note the relation of the head to the trunk. Grade according to diagrams.

If score differs on the two sides, take the mean.

External sign	*Score**				
	0	*1*	*2*	*3*	*4*
Edema	Obvious edema of hands and feet; pitting over tibia	No obvious edema of hands and feet; pitting over tibia	No edema		
Skin texture	Very thin, gelatinous	Thin and smooth	Smooth; medium thickness. Rash or superficial peeling	Slight thickening. Superficial cracking and peeling especially of hands and feet	Thick and parchment-like; superficial or deep cracking
Skin color	Dark red	Uniformly pink	Pale pink: variable over body	Pale; only pink over ears, lips, palms, or soles	
Skin opacity (trunk)	Numerous veins and venules clearly seen, especially over abdomen	Veins and tributaries seen	A few large vessels clearly seen over abdomen	A few large vessels seen indistinctly over abdomen	No blood vessels seen
Lanugo (over back)	No lanugo	Abundant; long and thick over whole back	Hair thinning especially over lower back	Small amount of lanugo and bald areas	At least ½ of back devoid of lanugo
Plantar creases	No skin creases	Faint red marks over anterior half of sole	Definite red marks over > anterior ½; indentations over < anterior ⅓	Indentations over > anterior ⅓	Definite deep indentations over > anterior ⅓
Nipple formation	Nipple barely visible; no areola	Nipple well defined; areola smooth and flat, diameter < 0.75 cm.	Areola stippled, edge not raised, diameter < 0.75 cm.	Areola stippled, edge raised, diameter > 0.75 cm.	
Breast size	No breast tissue palpable	Breast tissue on one or both sides, < 0.5 cm. diameter	Breast tissue both sides; one or both 0.5 - 1.0 cm.	Breast tissue both sides; one or both > 1 cm.	
Ear form	Pinna flat and shapeless, little or no incurving of edge	Incurving of part of edge of pinna	Partial incurving whole of upper pinna	Well-defined incurving whole of upper pinna	
Ear firmness	Pinna soft, easily folded, no recoil	Pinna soft, easily folded, slow recoil	Cartilage to edge of pinna, but soft in places, ready recoil	Pinna firm, cartilage to edge; instant recoil	
Genitals Male	Neither testis in scrotum	At least one testis high in scrotum	At least one testis right down		
Female (with hips ½ abducted)	Labia majora widely separated, labia minora protruding	Labia majora almost cover labia minora	Labia majora completely cover labia minora		

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*If score differs on two sides, take the mean.

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Title: RECOVERY ROOM ACTIVITY SCHEDULE

Author: Elms, Roslyn R.

Variables: This instrument provides information on five variables: spontaneous behavior activity (SBA), spontaneous behavior comfort (SBC), response to stimuli comfort (RSC), response to stimuli-positive responses (RSPR), and response to stimuli-negative responses (RSNR).

Description:

Nature and Content: This instrument consists of a list of overt patient behaviors and their respective comfort ratings. *Spontaneous behavior activity* is operationalized by counting body movements, verbal statements, and verbalizations made by a patient in a recovery room. *Spontaneous behavior comfort* is operationalized by observers' ratings of the amount of comfort expressed by patients in the recovery room, apparently in response to some inner feeling, impulse, or tendency without obvious external stimulation. A 4-point rating scale is used to record this information. The four response categories are defined as follows: 0 = no evidence of discomfort, 1 = evidence of mild discomfort, 2 = evidence of moderate discomfort, and 3 = evidence of severe discomfort.

Response to stimuli comfort is operationalized by observers' ratings of the amount of comfort expressed by patients in the recovery room, apparently in response to external stimulation. The same rating scale is used to record this information as is used to record the information gathered for *spontaneous behavior comfort. Response to stimuli-positive responses* is operationalized by comparing the number of positive responses made by the patient to external stimuli with the total number of such responses. A positive response is one which appears to indicate that a patient is willing to comply, cooperate, or correctly follow instructions. *Response to stimuli-negative responses* is operationalized by comparing the number of negative responses made by the patient to external stimuli with the total number of such responses. If fear or displeasure is indicated by the patient as part of a response, that response is rated as a negative response. So, too, are patient actions and/or responses which indicate unwillingness to cooperate, to comply with requests, or to follow directions. Responses which are neither clearly positive nor clearly negative, and/or which appear to have little connection to the stimulus, are defined as neutral responses."

Administration and Scoring: The information provided by the instrument is obtained by having an observer rate patients while they are in the recovery room. Each observation period is 15 minutes long, and is followed by a 15-minute nonobservation period. Each behavior is recorded in brief as it occurs and includes patient verbalizations, vocalizations, and body movements, as well as the apparent purpose of these behaviors. Continuous movements are recorded as one unit until there is at least a 3-second pause in that behavior or until a moving part is returned to its original position.

The score on "*spontaneous behavior activity*" (SBA) is computed in two steps: (1) add together the total number of body movements, verbal statements, and vocalizations that were apparently due to nonexternal stimuli, and (2) divide this total by the total number of units of spontaneous behavior. The resulting mean score can range from 0 to 3. The score on "*response to stimuli comfort*" is also computed in two steps: (1) add together the comfort indices for all behaviors apparently due to external stimulation, and (2) divide this sum by the total number of behaviors which occurred as a response to external stimulation. The resulting mean score can range from 0 to 3. The score on "*response to stimuli-positive responses*" is computed by dividing the number of positive responses to external stimuli by the total number of responses to external stimuli. This results in a percentage ratio of positive responses. The total number of responses is the sum of the positive, negative, and neutral external responses. The score on "*response to stimuli-negative responses*" is similarly computed, except that in this case the number of negative responses to external stimuli is divided by the total number of responses to external stimuli. A similar percentage ratio results.

Development:

Rationale: The author notes that,

> Nurses frequently believe that the patient who wakes quickly after surgery, cooperates easily with routine procedures, and has little discomfort will have less difficulty adapting postoperatively than the patient who takes a long time waking up, exhibits much discomfort, and finds extreme difficulty in coughing, turning, or following simple instructions. Proceeding on such assumptions is not uncommon in nursing, since nursing practice has traditionally been based on experience" (Elms, 1972).

This instrument was developed to provide information that could be used to systematically examine the relationship between patients' recovery room behaviors and their patterns of convalescence. Assuming that the positive relationships were observed between these two sets of variables, information on the former could then be gathered and made available to personnel who care for patients postoperatively. Hopefully, such information could be used to remediate or limit the severity of subsequent problems.

Source of Items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: The instrument was developed by observing 60 patients in the recovery room at Parkland Memorial Hospital, Dallas, Texas. The number of observation periods per patient varied from 1 to 12. Their ages ranged from 18 to 82 years and approximately one-third of the patients were males. A variety of surgical procedures, having a wide variety of risk, were performed on the patients. The surgical procedures lasted from 35 to 570 minutes. The scores on the five variables derived from this instrument were examined in relation to four other variables derived from the Postoperative Convalescence Questionnaire (Elms, 1972).

Reliability and Validity: Interobserver reliability information was gathered by comparing the author's scores on the five measures for several patients with those of the observer. The Pearson correlations for SBA and SBC, based on one session were 0.86. The Pearson correlation for RSC in two sessions was 0.88, and the Pearson correlation between the negative and positive Responses to External Stimuli was 0.86 for three sessions.

Scores on the five measures of Recovery Room Behavior were correlated with scores from the Postoperative Convalescence Questionnaire (Elms, 1972). Of the 25 correlations performed, only four showed statistical significance to another variable. *Response to stimuli-negative responses* (RSNR) was the most sensitive indicator of postoperative recovery as measured by the Postoperative Convalescence Questionnaire (Elms, 1972).

The correlation between the *spontaneous behavior comfort* (SBC) and the *response to stimuli comfort* (RSC) was 0.72.

Use in Research: Elms's (1972) use of the instrument is described in the reference cited below.

Comments: This instrument appears to have a potential for providing information on the variables it is presumed to measure. The initial interobserver reliability information suggests that there may be considerable agreement between observers. However, it would be desirable to have additional information regarding the characteristics of these measures before a more definitive conclusion is reached.

The information available does not indicate the number of patients or the range and type of surgical trauma experienced by the patients involved in the reliability phase of this test development effort. Since training was required to prepare observers to use this instrument, it would be useful to have additional information regarding these procedures.

The magnitude of the relationships between the five variables measured by this instrument and those from the Postoperative Convalescence Questionnaire is quite small, which suggests that how a patient behaves in the recovery room is minimally related to convalescence type behaviors. However, since the results are based on a fairly small sample, and since they are incongruent with what is expected, it would be useful to gather additional information on a larger sample of patients. Further exploration of the relation of recovery room scores to other convalescence data such as the number of pain medications received, the length of hospital stay, and the degree or type of surgical trauma would also be useful.

References:

Elms, Roslyn R. Recovery room behavior and postoperative convalescence. *Nursing Research*, 1972, *21*, 390–397.

Source of Information:

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Instrument Copyright:

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Elms, Roslyn R.

RECOVERY ROOM ACTIVITY SCHEDULE: GUIDELINES FOR SCORING

During each 15-minute observation period, the observer records in brief all overt behavior as it occurs, including verbalizations, vocalizations, and body movements. He then scores this behavior using the following guidelines:

0 = no discomfort

The observer used this score when the patient's behavior did not seem to indicate discomfort.

Examples:
Patient opens his eyes.
Patient says "Thanks."

1 = mild discomfort

This rating was used when the behavior indicating discomfort was of low intensity and of short duration, showed only slight muscle tension, and when the pace of movement was slow. Verbal pitch was soft (below normal speaking level); the patient was apparently able to tolerate the situation easily and made no obvious attempt to relieve his discomfort.

Examples:
Patient slowly turning head side to side for 3 seconds.
Patient rubbing incisions slowly with hand.
Patient frowning, but with only forehead involved.
Patient scratching ear.
Patient whimpering intermittently for a few seconds.

2 = moderate discomfort		The score was used when the patient was obviously restless, when muscle tension was easily apparent, when movements continued at a regular and quick pace and indicated that the patient was having some difficulty coping with the situation and was making some effort to relieve his doscomfort. Verbal pitch was clearly audible (normal speaking level or slightly above).
	Examples:	Patient's frowning involves forehead, eyebrows, eyes. Patient tossing head rapidly side to side for 7 seconds/ Patient groaning with each exhalation for 10 breaths. Patient asks nurse for help in turning over. Patient adjusting oxygen mask 5 times consecutively.
3 = severe discomfort		The behavior in this category showed rigid muscle tension and extreme restlessness; movements were abrupt and sometimes wild; the behavior continued over an extended period of time. Verbal pitch was loud enough to be shouting or screaming, and the situation seemed to demand immediate attention. The patient seemed unable to cope with the situation and was trying very hard to relieve the discomfort in some way.
	Examples:	Patient throwing chest at side rails twice in an attempt to get out of bed. Patient grimaces involving entire face, mouth pulled back and teeth clenched. Fists clenched so knuckles are white.

Patient's body arching from bed as he is suctioned. Neck muscles rigid.
Patient screaming out loud several times that he is in severe pain.
Patient yelling for a nurse to help him.
Patient crying uncontrollably.

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Title: DATA COLLECTION SHEET FOR ASSESSMENT OF PATIENT'S POTENTIAL FOR PRESSURE SORES

Author: Gosnell, Davina J.

Variables: This instrument provides information on eight variables: mental status, continence, mobility, activity, nutrition, skin appearance, skin tone, and skin sensation. *Mental status* is defined to mean assessment of one's level of responses to his environment. *Continence* is defined as amount of bodily control of urination and defecation. *Mobility* is defined as amount and control of movement of one's body. *Activity* is defined to mean ability of an individual to walk. *Nutrition* is defined as process of food intake. *Skin appearance* is defined to mean the description of observed skin characteristics. *Skin tone* is defined to mean degree of turgor and tension of the skin, and *skin sensation* is defined as the response to tactile stimuli of the epidermis. Each of the first five variables is operationalized by rating a patient on the single rating scale for that variable; skin appearance, skin tone, and skin sensation are not rated numerically.

Description:

Nature and Content: The Data Collection Sheet for Assessment of Patient's Potential for Pressure Sores is made up of eight questions, each of which provides information on one of the eight variables described above. In addition, the instrument is designed to identify information regarding vital signs, medication, and demographic information such as age, sex, weight, height, and diagnosis. A rating scale with three to five response categories is provided for the first five variables (mental status, continence, mobility, activity, and nutrition). No numerical code is associated with the response categories for skin appearance, skin tone or skin sensation.

Five response categories are used to describe mental status: unconscious, stuporous, confused, apathetic, and alert. Four response categories describe continence status: absence of control, minimally controlled, usually controlled, and fully controlled. Four response categories describe mobility status: immobile, very limited, slightly limited, and full. Four response categories capture information on activity: bedfast, chairfast, walks with help, and ambulatory. Three response categories are used to provide information on nutrition: poor, fair, and good.

Three categories are used to assess skin tone: hard, moderate, and loose. No instructions were provided on how to apply these codes other than to indicate that the skin at identified high risk sites should be stimulated for touch and 2-point discrimination.

Skin appearance is assessed by the rater using his(her) own adjectives, e.g., dry, oily, flaccid, etc.

Administration and Scoring: This instrument was designed to be used by a nurse as one part of a typical patient assessment procedure. From 3 to 5 minutes are required to complete the instrument.

A test score is computed by summing the responses to the first five variables. The score may range from 5 to 20. A low score is presumed to indicate poorer health status.

Development:

Rationale: This instrument was developed because of the author's belief that the presence of pressure sores constitutes a significant problem, both in terms of cost of care and personal discomfort for a substantial number (10–15 percent) of patients. Since little information was presumed to be available regarding why a particular patient develops pressure sores, it was hoped that the data gathered from this instrument would provide some leads that could be used to reduce the incidence of this problem.

Source of Items: The test variables were based upon research conducted by Norton et al. (1962).

Procedure for Development: This instrument was administered to 30 patients within 24 hours after they were admitted to one of four extended care facilities located in the Ohio metropolitan area. The patients ranged in age from 65 to 91 years. All but one were Caucasian, two-thirds were females. None of these persons had a pressure sore at the first administration of the test. The instrument was readministered to patients on a biweekly basis for 4 weeks, unless a pressure sore developed, or the patient was discharged.

Reliability and Validity: No information was provided regarding the test-retest, generalized split-half, or interrater reliability characteristics of the instrument.

Test scores on this instrument for the 30 patients ranged from 10 to 20. The mean score was approximately 17. Four of the 30 patients developed pressure sores. Two of these had scores from 16–20. Nineteen patients who did not develop a pressure sore also had scores within this range. The other two patients who developed a pressure sore had test scores from 11–15. Six patients who did not develop a pressure sore also had scores within this range.

The four patients who developed a pressure sore had had scores on this test which decreased from 1 to 8 points across a 4-week observation period. Eight patients who did not develop pressure sores had similar decreases in their test scores.

Use in Research: Gosnell (1973) described the development and use of the instrument in the publication referenced below.

Comments: As a result of her use of the instrument, the author recommends that provision for the collection of the following data be added by any potential user:

1. Medications—name, dosage, frequency;
2. Hydration and circulatory status including intake and output;
3. Temperature, pulse, respiration, and blood pressure at the actual time of the observation of the patient;
4. Type of diet ordered for the patient;
5. A measure of protein metabolism via laboratory studies to more accurately assess each patient's nutritional status.

The Data Collection Sheet for Assessment of Patient's Potential for Pressure Sores appears to be easy to administer and score, and the item used to measure each variable appears to have face validity. Consequently, the instrument appears to have some potential for providing information regarding the development of pressure sores. However, due to the very limited nature of the sample (only four patients actually developed pressure sores), and the similarity in test scores, both at a point in time and across time for those who did and those who did not develop pressure sores, it is premature to draw any definitive conclusions about the ultimate usefulness of the instrument.

The rating categories for the various variables are fairly easy to understand. The end points of each set of rating categories, in particular, are clear and distinct. However, there is some ambiguity in categories adjacent to each other. For example, for the variable *mobility*, the choices "very limited" and "slightly limited" are defined by essentially the same phrases—"Requires assistance to change position" and "Requires the assistance of another person to change position." Consequently, it is uncertain what determines how an observer decides which category to use for a particular observation.

No information was presented that provided a rationale for combining the responses to the five variables into one score. The information available does not indicate a substantive relationship between a total test score and the presence of pressure sores. It would be useful, therefore, to have information regarding the relationship between individual variables and/or various combinations of variables and the presence of pressure sores. A large number of patients should be studied, and, from such data, a factor weighting scheme based on empirical evidence developed which would identify those patients at risk for developing decubiti.

Any potential user should consult all of the most recent literature available on decubiti as well.

References:

Gosnell, Davina J. An assessment tool to identify pressure sores. *Nursing Research*, 1973, *22* (1), 55–59.

Norton, Doreen, et al. *An investigation of geriatric nursing problems in hospitals.* London: National Corporation for the Care of Old People, 1962.

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Instrument Copyright:

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DATA COLLECTION SHEET FOR ASSESSMENT OF PATIENT'S POTENTIAL FOR PRESSURE SORES

Name________________

Age ____ HT.________

Sex ____ WT.________

Diagnosis_____________________

Date of Admission_______________

Date of Discharge_______________

RATING SCALE

	MENTAL STATUS:	CONTINENCE:	MOBILITY:	ACTIVITY:	NUTRITION:	
	5 Alert 4 Apathetic 3 Confused 2 Stuporous 1 Unconscious	4 Fully controlled 3 Usually Controlled 2 Minimally Controlled 1 Absence of Control	4 Full 3 Slightly Limited 2 Very Limited 1 Immobile	4 Ambulatory 3 Walks with assistance 2 Chairfast 1 Bedfast	3 Good 2 Fair 1 Poor	
Date						TOTAL SCORE

VITAL SIGNS			SKIN APPEARANCE	SKIN TONE	SKIN SENSATION	MEDICATIONS:	COMMENTS:
T	P	BP					

GUIDE FOR NUMERICAL RATING OF THE DEFINED CATEGORIES

RATING	1	2	3	4	5
Mental Status: An assessment of one's level of response to his environment.	**Unconscious:** Non-responsive to painful stimuli	**Stuperous:** Total disorientation. Does not respond to name, simple commands, or verbal stimuli	**Confused:** Partial and/or intermittent disorientation to TPP. Purposeless response to stimuli. Restless aggressive, irritable, anxious & may require tranquilizers or sedatives	**Apathetic:** Lethargic, forgetful, drowsy, passive & dull, sluggish, depressed. Able to obey simple commands. Possibly disoriented to time.	**Alert:** Oriented to time, place, & person. Responsive to all stimuli, and understands explanations.
Continence: The amount of bodily control of urination & defacation.	**Absence of Control:** Incontienet of both urine & feces.	**Minimally controlled:** Often incontinent of urine with occasional-to often incontinence of feces.	**Usually controlled:** Incontinent of urine &/or of feces once in awhile - or - has foley catheter & is incontinent of feces.	**Fully Controlled:** Total control of urine and feces.	
Mobility: The amount and control of movement of one's body.	**Immobile:** Does not assist self in any way to change position. Is unable to change position without assistance. Is completely dependent on others for movement.	**Very Limited:** Requires assistance to change position. Offers minimal assistance in helping to change one's position. May have contractures, paralyses, etc.	**Slightly Limited:** Able to control and move all extremities but some degree of limitation may be present. Requires the assistance of another person to change position.	**Full:** Able to control and move all extremities at will. May require the use of a device but can turn, lift, pull, balance, and attain sitting position at will.	
Activity: The ability of an individual to ambulate.	**Bedfast:** Is confined to bed during entire 24 hours of the day.	**Chairfast:** Ambulates only to a chair; requires assistance to do so-or-is confined to a wheelchair.	**Walks with Help:** Able to ambulate with assistance of another person, braces, or crutches. May have limitation of stairs.	**Ambulatory:** Is able to walk unassisted. Rises from bed unassisted. With the use of a device such as cane or walker is able to ambulate without the assistance of another person.	

Nutrition:	Poor:	Fair:	Good:
The process of food intake.	Seldom eats a complete meal. Eats only a few bites of food at a meal. Is dehydrated & has minimal fluid intake.	Occasionally refuses a meal or frequently leaves the larger portion of a meal. Must be encouraged to take fluids.	Eats some food from each category of the Basic 4 every day. Drinks 6-8 glasses of fluid every day. Eats the major portion of each meal served - or - is receiving tube feedings.

Assessment of the skin was made but not rated numerically. It was described in the following manner:

Skin Appearance:	
A description of observed skin characteristics.	Terms used: Dry, oily, wrinkled, scaly, flaccid, etc.

Skin Tone:			
The degree of turgor and tension of the skin determined by pinch at specific high-risk sites for pressure sores.	Hard	Moderate	Loose

Skin Sensation:				
The response of an individual to tactile stimuli of the epidermis. Identified high-risk sites for pressure sores stimulated for touch and two point descrimination.	None	Slight	Moderate	Great

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Title: ORAL HYGIENE INDEX (OHI) and SIMPLIFIED ORAL HYGIENE INDEX (OHI-S)

Authors: Greene, John C., and Vermillion, Jack D.

Variable: Oral hygiene as identified by the extent of oral debris and calculus found on selected teeth is the variable. Oral debris is defined as the soft foreign matter loosely attached to the teeth. It consists of mucin, bacteria, and food, and varies in color from greyish-white to green or orange. Calculus is defined as a deposit of inorganic salts composed primarily of calcium carbonate and phosphate mixed with food debris, bacteria and desquamated epithelial cells.

Description:

Nature and Content: Both of these instruments include a physical examination of the mouth and a scoring system used to rate the cleanliness of the mouth. As their titles indicate, the OHI-S is a simplified version of the OHI designed to offer a more rapid method for evaluating oral cleanliness of population groups.

The two instruments differ in the number of tooth surfaces scored, the method of selecting surfaces to be scored, and the scores which can be obtained. For the Simplified Oral Hygiene Index, only 6 surfaces (from 4 posterior and 2 anterior teeth) are examined for debris and calculus; 12 surfaces are examined for the Oral Hygiene Index. Only fully erupted permanent teeth are scored.

Both the OHI and the OHI-S have two components, the Debris Index and the Calculus Index. Each of these Indexes, in turn, is based on numerical determinations representing the amount of debris or calculus found on the preselected surfaces. The individual Indexes are derived from scores based on the fraction of tooth surface area covered by debris or calculus. The scores and criteria for both Indexes are identical.

The scores and criteria for oral debris are:

0—No debris or stain present.
1—Soft debris covering not more than one-third of the tooth surface, or the presence of extrinsic stains without other debris regardless of the surface area covered.
2—Soft debris covering more than one-third, but not more than two-thirds, of the exposed tooth surface.
3—Soft debris covering more than two-thirds of the exposed tooth surface.

The scores and criteria for oral calculus are:

0—No calculus present.
1—Supragingival calculus covering not more than one-third of the exposed tooth surface.
2—Supragingival calculus covering more than one-third but not more than two-thirds of the exposed tooth surface, or the presence of individual flecks of subgingival calculus around the cervical portion of the tooth, or both.
3—Supragingival calculus covering more than two-thirds of the exposed tooth surface, or a continuous heavy band of subgingival calculus around the cervical portion of the tooth, or both.

Diagrams and illustrations of these scoring categories are included in Greene and Vermillion (1960).

Administration and Scoring: To determine the debris and calculus scores, each of the preselected surfaces are examined, first for debris and then for calculus. In both instruments the surface area covered by debris is estimated by running the side of a No. 23 explorer (Shepard's Crook) along the tooth surface being examined. The occlusal or incisal extent of the debris is noted as it is removed. A No. 23 explorer is also used to estimate the surface area covered by supragingival calculus and to probe for subgingival calculus. The examiner is instructed to score the lesser value when in doubt about which score to assign. It was estimated that not more than 2 minutes per person were required for the OHI examinations given in one study (Greene and Vermillion, 1960).

When preparing to use the debris and calculus components of the OHI and OHI-S, standardization of examiners and examination procedures are essential. The sequence of observations is quite critical. When other types of observations are to be made, the sequence should be such that the debris and calculus are not disturbed before they are assessed.

As stated above, the criteria used to assign the scores to the tooth surfaces in the OHI-S are the same as those used for the OHI. The same procedure is followed to compute scores for both instruments, the only difference being that 12 scores are recorded for each Index of the OHI and six scores for each Index of the OHI-S. After the scores for debris and calculus are recorded, the Index values are calculated. For each individual, the debris scores are totalled and divided by the number of surfaces scored. (In the OHI-S, at least two of the six possible surfaces must have been examined for an individual score to be calculated.) A score for a group of individuals is obtained by computing the average of the individual scores. The average individual or group score is known as the Debris Index (DI). The same methods are used to obtain the calculus score or Calculus Index (CI). The average individual or group debris and calculus scores are combined to obtain the Oral Hygiene Index or Simplified Oral Hygiene Index. The CI and DI values may each range from 0 to 6, and the total Index values from 0 to 12, on the OHI. These values are reduced by half for the OHI-S.

In one study using the OHI-S (Greene, 1963) subjective assignments of the terms "good," "fair," and "poor" were applied to correspond to different levels of debris and calculus for two groups of children 12-14 years of age. The ranges for the DI-S and CI-S of these groups were: good (0.0 to 0.6), fair (0.7 to 1.8), and poor (1.9 to 3.0). The ranges for the same groups for the OHI-S (overall index score) were: good (0.0 to 1.2), fair (1.3 to 3.0), and poor (3.1 to 6.0).

Development:

Rationale: The need to categorize individuals and groups to their oral hygiene status was the force that precipitated the development of the Oral Hygiene Index.

The authors believed that such a tool would be useful when studying the epidemiology of periodontal disease and oral calculus, when assessing tooth brushing efficiency, and when evaluating the dental health practices of a community and the immediate as well as long-term effects of dental health education procedures.

The authors felt that the original Oral Hygiene Index required the user to make more decisions and to spend more time in arriving at his evaluation of an individual's oral cleanliness than is always warranted. Therefore, an effort was made to develop another equally sensitive index which would reduce both the number of decisions required on the part of the examiner and the time required for the inspection. The result of this effort is the Simplified Oral Hygiene Index.

Source of Items: The content of the Indices was based upon a review of the literature and the professional experience of the authors.

Procedure for Development: In the development of the OHI-S, 232 men, women, and children from Huntington, W. Va. and Suitland, Md. were examined, and every tooth surface was scored for debris and calculus. After careful study, six surfaces were selected from among all of these surfaces as those which provide reasonably representative information on the oral cleanliness of the segment of the mouth of which they are part as well as the whole mouth.

Reliability and Validity: A group of Navy recruits were examined and reexamined in the same half day by the same examiners (Smith et al., 1970). Reexaminations were randomly intermixed with examinations of new recruits so the examiners did not know when a reexamination was being performed. Debris, supragingival calculus, and subgingival calculus scores were recorded separately. The overall percentages of agreement between first and second scores on the 627 surfaces examined were: debris 80 percent, supragingival calculus 93 percent, and subgingival calculus 76 percent. These figures represent the percentage of intraexaminer agreement. Interexaminer agreement percentages in other studies have been lower.

An inverse relationship between oral hygiene scores and toothbrushing frequency was demonstrated in a field trial of the OHI (Greene and Vermillion, 1960). A positive correlation was demonstrated between the debris, calculus, and OHI and Russell's Periodontal Index, and the OHI was shown to be more closely correlated with the Russell Periodontal Index than either of the OHI's separate component indexes (Greene and Vermillion, 1960).

Use in Research: The OHI and OHI-S have been used in many clinical and epidemiological studies. Two examples of the use of the OHI-S are provided in the reports by Suomi, "Periodontal Disease and Oral Hygiene in an Institutionalized Population: Report of an Epidemiological Study" (1969) and Smith, Suomi, Greene, and Barbano, "A Study of Intra-Examiner Variation in Scoring Oral Hygiene Status, Gingival Inflammation, and Epithelial Attachment Level" (1970).

Comments: The OHI and OHI-S have proven useful in evaluating dental health education programs in public school systems, in evaluating the cleaning efficiency of toothbrushes, and in evaluating patients' oral hygiene practices. A modification of the calculus portion of the index has been used in a study of the epidemiology of calculus formation, and a modification of the OHI-S has been employed in a longitudinal study of periodontal disease. The author suggests several modifications of the examination procedure if the purpose of the examination is to determine the effectiveness of a device or procedure in removing soft deposits from the teeth, or when small differences among patients are expected (Greene, 1967).

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ORAL HYGIENE INDEX (OHI) AND SIMPLIFIED ORAL HYGIENE INDEX (OHI-S)

Name ______________________ Age _____ Sex M___ F___ Grade _____ Race W___ N___

School ______________________ Date of Examination ______________________

	DEBRIS					CALCULUS			
	Right	Ant.	Left	Totals		Right	Ant.	Left	Totals
Upper	(B) / (L)				Upper	(B) / (L)			
Lower					Lower				
Totals					Totals				

Debris Index ______________ Calculus Index ______________

Oral Hygiene Index ______________

Frequency of Toothbrushing: Seldom _____ Daily _____

BID _____ TID _____

CRITERIA FOR CLASSIFYING ORAL DEBRIS

Oral debris is defined as the soft foreign matter on the surface of the teeth, consisting of mucin, bacteria and food, and varying in color from greyish white to green or orange.

As stated previously, two scores should be assigned to each segment in which there are fully erupted permanent teeth present: one score for the buccal surface having the greatest surface covered by debris and one score for the lingual surface.

The scores and criteria for oral debris are:

0--No debris or stain present.

1--Soft debris covering not more than one third of the tooth surface, or the presence of extrinsic stains without other debris regardless of surface area covered.

2--Soft debris covering more than one third, but not more than two thirds, of the exposed tooth surface.

3--Soft debris covering more than two thirds of the exposed tooth surface.

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CRITERIA FOR CLASSIFYING CALCULUS

Dental calculus is defined as a deposit of inorganic salts composed primarily of calcium carbonate and phosphate mixed with food debris, bacteria, and desquamated epithelial cells. Dental calculus is divided into two types, differentiated primarily by location on the tooth in relation to the free gingival margin: (1) "supragingival calculus" denotes deposits located occlusal to the free gingival margin and usually white to yellowish brown in color; and (2) "subgingival calculus" denotes deposits located apically to the free gingival margin, which are usually light brown to black in color because of inclusion of blood pigments.

Only definite deposits of hard calculus should be recorded. According to the criteria, two scores are assigned to each segment having one or more fully erupted permanent teeth present--one score for the buccal surface in the segment and one score for the lingual surface having the greatest accumulation of calculus. The buccal score and the lingual score for a particular segment need not be taken from the same tooth.

The scores and criteria for oral calculus are:

0--No calculus present.

1--Supragingival calculus covering not more than one third of the exposed tooth surface.

2--Supragingival calculus covering more than one third but not more than two thirds of the exposed tooth surface or the presence of individual flecks of subgingival calculus around the cervical portion of the tooth or both.

3--Supragingival calculus covering more than two thirds of the exposed tooth surface or a continuous heavy band of subgingival calculus around the cervical portion of the tooth or both.

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Title: INDEX OF INDEPENDENCE IN ACTIVITIES OF DAILY LIVING (INDEX OF ADL)

Author: Katz, Sidney

Variables: The Index of ADL measures the independence of the chronically ill and aging person in the performance of six hierarchically related functions: (1) bathing, (2) dressing, (3) going to toilet, (4) transferring, (5) continence, and (6) feeding. Independence is defined as "acting without supervision, direction, or active personal assistance," and performance is based on actual status, not on ability.

Description:

Nature and Content: This instrument has two parts: (1) a 6-item observational rating scale (called the Evaluation Form) on which the observer checks one of three degrees of independent-dependent behavior for each of the six functions, and (2) a grading or scoring sheet (called the Index) which specifically defines independence and dependence in terms of the six functions and permits the patient to be ranked according to a defined continuum. Each item on the rating scale is fully anchored and designed to increase observer awareness of subtle distinctions by introducing an intermediate description. This intermediate position is translated into dependence for some items and into independence for others in the bipolar definitions on the scoring sheet. Definitions and categories for grading the patient are presented on the instrument itself.

Administration and Scoring: Extensive guides are not needed to administer the Index, although initially the observer may be required to study the definitions provided for each of the six functions. By means of a series of questions and observations, the observer forms a mental picture of the patient's ADL status as it existed during a 2-week period preceding the evaluation. The observer may create test situations, such as asking the patient to show the observer the bathroom, as a means of verifying observations. If special conditions or regulations exist which might influence the ratings, these should be noted. For example, a patient might not be allowed use of the shower unattended.

The rating scale allows for classification of patient behavior on each of the six variables on a 3-point scale. In order to score the Index, the investigator reduces the observed behavior to either independent or dependent by following the definition guidelines on the scoring sheet. For example, a person who can eat without assistance except for cutting meat and buttering bread (the intermediate position on the scale of feeding) is classified as independent, while the person who needs assistance in getting in or out of bed or a chair (the intermediate position on the scale of transfer) is classified as dependent. The patient is ultimately scored on a continuous scale of A to G, where A represents independence and G dependence in all functions. This hierarchical grading scale is designed to reflect the order of recovery (or the progressive loss of ability). Occasionally, a patient who can adequately perform a more basic function but not a less basic one may be classified as "other." By definition, this classification is more dependent than A or B, but more independent than G.

A modified form of scoring the Index of ADL has been successfully used and eliminates the need for the category of "other." In this version, scores of the Index of ADL represent the number of activities in which the individual is dependent. Scores expressed as 0, 1, 2, 3, 4, 5, or 6 thus reflect the number of areas of dependence as a single summary term. This type of scoring correlates highly with the original scale and does not assume an inherent hierarchical order among the variables.

Development:

Rationale: The Index of the ADL was developed to study the results of treatment and prognosis in the elderly and chronically ill.

In the course of the use of the instrument, it has been observed that the order of recovery of Index functions in disabled patients is remarkably similar to the order of development of primary functions in children. This parallelism and similarity to the behavior of primitive people described in anthropological studies has given rise to the theory that the Index appears to be based on primary biological and psychosocial functions and reflects the adequacy of organized neurological and locomotor response (Katz et al., 1963).

Source of Items: Items were developed from extensive observations of function-dysfunction among severely disabled people. Activities which appeared empirically to be related in a hierarchical nature were retained, and those which were not hierarchically related were discarded. Guttman-type techniques were utilized in item selection.

Procedure for Development: The original form of the instrument was constructed as a result of detailed analyses of the patterns of activity status (not ability) in study patients. It included detailed definitions for the six functions together with the A-G ranking classifications. The observational 3-point rating scale was developed at a later date, and the operational definitions for use with this scale have been expanded.

Reliability and Validity: After a short training period, simultaneous observers differed in their observations only once in 20 evaluations or less frequently. Katz et al., (1970) investigated the predictive validity of the ADL using as subjects 270 patients discharged from a hospital for the chronically ill. The measure of relationship used was the *Index of Order Association.* The ADL was administered at the time of hospitalization, then patients were observed 2 years after discharge and evaluated in terms of three criteria: survival, mobility, and house-confinement. Relationships with ADL scores were as follows: survival, −0.22 (not significant); mobility, 0.50 (significant at 0.05 level); and house-confinement, 0.39 (not significant at 0.05 level, but significant at 0.10). All relationships were in the hypothesized directions.

The independent convergence between the hierarchical order of variables within this scale and the hierarchical orders of behavior in child development and in primitive-civilized development give supportive evidence to the construct validity of the instrument. The successful use of the instrument to detect group differences in various research studies provides some evidence of the discriminatory validity of the instrument.

Use in Research: This instrument has been used frequently to assess need for care, to determine the effectiveness of treatment, and as a teaching aid in rehabilitation. It has also been used as a tool to help accumulate information about prognosis and about the dynamics of disability in the aging process (Katz et al., 1970, Katz and Akpom, 1976). As an example, 300 consecutively discharged patients from Abington House, a hospital for the chronically ill in Cleveland, were admitted into a 2-year study whose primary goal was to test experimentally the effectiveness of a sustained program of home nursing services after rehabilitation (Ford et al., 1965).

Comments: Interobserver reliability as reported is relatively high for this type of measure. The predictive validities are low to moderate, although it should be noted that the time span between administration of the ADL and assessment of the outcome criteria is long (2 years), and the criteria are vigorous. The ADL should be useful in studies on prevention of disability and in maintenance of rehabilitation gains in the aged. It may also be quite useful in theoretical studies designed to test the similarity between recovery of disabled patients and developmental growth of children. Users are urged to respect the six variables measured as to their utility for the particular purpose at hand. In some cases, it may be desirable to use scales measuring other activities than those represented by the ADL even though such scales may not be "hierarchically pure."

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Instrument Copyright: None.

Katz, Sidney

INDEX OF INDEPENDENCE IN ACTIVITIES OF DAILY LIVING (INDEX OF ADL)

Name______________________________Day of evaluation______________________________

For each area of functioning listed below, check description that applies. (The word "assistance" means supervision, direction, or personal assistance.)

Bathing--either sponge bath, tub bath, or shower.

☐ Receives no assistance (gets in and out of tub by self if tub is usual means of bathing)

☐ Receives assistance in bathing only one part of the body (such as back or a leg)

☐ Receives assistance in bathing more than one part of the body (or not bathed)

Dressing--gets clothes from closets and drawers--including underclothes, outer garments and using fasteners (including braces if worn)

☐ Gets clothes and gets completely dressed without assistance

☐ Gets clothes and gets dressed without assistance except for assistance in tying shoes

☐ Receives assistance in getting clothes or in getting dressed or stays partly or completely undressed

Toileting--going to the "toilet room" for bowel and urine elimination; cleaning self after elimination, and arranging clothes

☐ Goes to "toilet room," cleans self, and arranges clothes without assistance (may use object for support such as cane, walker, or wheelchair and may manage night bedpan or commode, emptying same in morning)

☐ Receives assistance in going to "toilet room" or in cleansing self or in arranging clothes after elimination or in use of night bedpan or commode

☐ Doesn't go to room termed "toilet" for the elimination process

Transfer--

☐ Moves in and out of bed as well as in and out of chair without assistance (may be using object for support such as cane or walker)

☐ Moves in and out of bed or chair with assistance

☐ Doesn't get out of bed

Continence--

☐ Controls urination and bowel movement completely by self

☐ Has occasional "accidents"

☐ Supervision helps keep urine or bowel control; catheter is used, or is incontinent

Feeding--

☐ Feeds self without assistance

☐ Feeds self except for getting assistance in cutting meat or buttering bread

☐ Receives assistance in feeding or is fed partly or completely by using tubes or intravenous fluids

The Index of Independence in Activities of Daily Living is based on an evaluation of the functional independence or dependence of patients in bathing, dressing, going to toilet, transferring, continence, and feeding. Specific definitions of functional independence and dependence appear below the index.

A—Independent in feeding, continence, transferring, going to toilet, dressing, and bathing.
B—Independent in all but one of these functions.
C—Independent in all but bathing and one additional function.
D—Independent in all but bathing, dressing, and one additional function.
E—Independent in all but bathing, dressing, going to toilet, and one additional function.
F—Independent in all but bathing, dressing, going to toilet, transferring, and one additional function.
G—Dependent in all six functions.

Other—Dependent in at least two functions, but not classifiable as C, D, E, or F.

Independence means without supervision, direction, or active personal assistance, except as specifically noted below. This is based on actual status and not on ability. A patient who refuses to perform a function is considered as not performing the function, even though he is deemed able.

Bathing (Sponge, Shower, or Tub)

Independent: assistance only in bathing a single part (as back or disabled extremity) or bathes self completely

Dependent: assistance in bathing more than one part of body; assistance in getting in or out of tub or does not bathe self

Dressing

Independent: gets clothes from closets and drawers; puts on clothes, outer garments, braces; manages fasteners; act of tying shoes is excluded

Dependent: does not dress self or remains partly undressed

Going to Toilet

Independent: gets to toilet; gets on and off toilet; arranges clothes; cleans organs of excretion (may manage own bedpan used at night only and may or may not be using mechanical supports)

Dependent: uses bedpan or commode or receives assistance in getting to and using toilet

Transfer

Independent: moves in and out of bed independently and moves in and out of chair independently (may or may not be using mechanical supports)

Dependent: assistance in moving in or out of bed and/or chair; does not perform one or more transfers

Continence

Independent: urination and defecation entirely self-controlled

Dependent: partial or total incontinence in urination or defecation; partial or total control by enemas, catheters, or regulated use of urinals and/or bedpans

Feeding

Independent: gets food from plate or its equivalent into mouth (precutting of meat and preparation of food, as buttering bread, are excluded from evaluation)

Dependent: assistance in act of feeding (see above); does not eat at all or parenteral feeding

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0 = Independent in all six functions (bathing, dressing, feeding, continence, transfer, toileting)

1 = Independent in five functions and dependent in one function

2 = Independent in four functions and dependent in two functions

3 = Independent in three functions and dependent in three functions

4 = Independent in two functions and dependent in four functions

5 = Independent in one function and dependent in five functions

6 = Dependent in all six functions

Title: MINOR ILLNESS INVENTORY

Authors: Lakin, Jean A., Anselmo, Sandra A. and Solomons, Hope C.

Variable: The instrument was developed to assess the nature and incidence of minor illnesses of children in day care centers. Minor illnesses are defined in terms of the identification of observable symptoms, rather than specification of a diagnosis—e.g., "runny, stuffed nose" rather than "cold."

Description:

Nature and Content: The Minor Illness Inventory is a 51-item checklist inventory of symptoms designed to study the nature and incidence of minor illnesses in children under 6 years of age. Many items are grouped into categories of similar location or function. For example, "Eyes" may have "discharge, clear" or "discharge, colored/thick"; or they may be "red" or "swollen." "Urination" may be "frequent" or "painful." Four of these items refer to changes in the child's activity level, appetite, sleeping pattern, and mood. Space is provided to note the child's absence from the day care center, the presence of observable injury, and "any symptoms mentioned by parents at the start of the day."

Space is also provided for recording observations for each day of a 5-day week.

Administration and Scoring: The checklist relies mainly on ratings by caregivers of observable symptoms, but does include a few places for recording self-reports by older children—e.g., "says ear hurts." The presence of any symptoms at a particular time of day—e.g., midmorning or midafternoon—is recorded by checking the appropriate box. Items that require the observer to assess change necessitates observation of the child over a period of days. Detailed descriptions of each symptom appear in a scoring manual available from the authors. The authors state that most adults can readily learn to use the inventory and that use of the scoring manual and careful training sessions help to avoid definitional questions (Lakin et al., 1975).

Results are tabulated for each individual item. The total number of symptoms for each child can be obtained by summing the number of checkmarks.

Development:

Rationale: The author states that there is an urgent need to delineate what constitutes minor illness in children over the entire age range from 2 months to 5 years who are in group day care settings. Little is known regarding minor illness which occurs in day care settings, and no standardized method exists for recording symptoms. The need for assessment is underscored by the recent American Academy of Pediatrics recommendation that children experiencing minor illness can be cared for in nursery school or day care placement at the discretion of the parent.

Source of Items: Content of the inventory was established through: (1) an in-depth review of the literature for symptoms of minor illness occurring in the infancy and preschool years, (2) observation of children for overt symptoms of minor illness, and (3) consultation with other health care professionals.

Procedure for Development: The staff of the Early Childhood Education Center, a teaching and research facility at the University of Iowa, used the inventory to systematically collect data on 84 children ranging in age from 2 months to 5 years who were enrolled at the Center. The staff at the Center used the inventory for 1 week and then it was revised on the basis of their recommendations. This step was repeated several times until the tool was clear and easy to use in the opinion of the authors and Center staff.

Reliability and Validity: Reliability was determined by the agreement between caregivers or between caregiver and registered nurse as to whether a symptom was present or absent in a child on a given day. Assessment was made daily at a set time over a period of a month for the 84 children mentioned above. For each pair of raters, the ratio between agreement on observation of a certain symptom and the number of possible observations were computed. Between all pairs of raters and over all symptoms, the mean reliability was 0.90 (Lakin et al., 1975).

Content validity was established through a comprehensive method of item selection involving consultation with health care workers, authors of studies on health in day care, and the staff of the Early Childhood Education Center.

Use in Research: The Inventory does not appear to have been used in any research study other than the one conducted for its development.

Comments: The authors have established the reliability of their instrument for use by trained observers with a sample of children representing the full spectrum of families in a university community. They acknowledge that their initial effort is a pilot study and that "further work with the Minor Illness Inventory will be necessary before making more definitive statements about the nature and incidence of minor illness in young children in day care centers" (Lakin et al., 1975).

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Lakin, J. A., Anselmo, S. A., and Solomons, H. C. *Development of a minor illness inventory for children in day care centers.* Presented at the 103rd annual meeting of the American Public Health Association, Chicago, 1975.

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Instrument Copyright: None.

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MINOR ILLNESS INVENTORY

		Monday	Tuesday	Wednesday	Thursday	Friday
Absent (give reason)						
Appearance						
Change in activity level (+, -)						
Change in appetite (+, -)						
Change in sleeping pattern						
Change in mood						
Skin:	flushed face					
	pale					
	hot/sweaty					
	cold					
	scratching (specify where)					
	rash: diaper rash					
	heat rash					
	cradle cap					
	straw colored sore					
	other (specify)					
Eyes:	discharge, clear					
	discharge, colored/thick					
	red					
	swollen					
Ears:	says ear hurts					
	pulls at ear					
	discharge					
	hard of hearing					
Head:	says head hurts					
Hair/scalp:	lice					
	scaly patches of baldness					
Nose:	runny, stuffy					
	sneezing					
	nosebleed					
Mouth/throat:	rubs gums, swollen gums					
	white patches in mouth					
	says tooth hurts					
	hoarse voice or cry					
	says throat hurts					
	mouthbreather					
Lungs:	cough					
	noisy or difficult breathing					
	wheezing					
Abdomen/stomach:	says stomach or abdomen hurts					
	vomiting					
	gas					
Elimination:	Bowel movements; frequent					
	loose					
	worms in stool					
	straining, difficulty					
Urination:	frequent					
	painful					
Injury:	bite, sore bruise, burn, cut, accident (specify)					

Describe any symptoms mentioned by parents at the start of the day:

Scoring Manual

Absent from center	List reason
Appearance	Record appropriate term. May appear tired, uncomfortable, or ill; not "up to par."
Change in activity level	Record whether - or +: -: Much quieter than usual, appears listless, decreased interest in surroundings, play, or people. +: More active than usual, very restless, "in orbit."
Change in appetite	Record whether - or +: -: Little or no appetite; has hardly touched food, not interested in eating. +: Eating and drinking more than usual amounts, after being "off" food for a few days, appetite has returned.
Change in sleeping pattern	Naps more than usual, less than usual.
Change in mood	Record appropriate term. Withdrawn, clings, seems unhappy, whines; increased demands for attention and close physical contact.
	Appears angry, upset; temper tantrums, irritable, uncooperative.
Skin	
Flushed face	Continuous red or reddish color of face, warm to touch. Exclude reddish color with rough patches of skin commonly seen with exposure to weather conditions and changes following vigorous physical activity which may produce a temporary reddish color of the face.
Pale	Whitish appearance, skin lacks reddish color.
Hot/sweaty	Identify appropriate symptoms. Child feels hot to touch; complains of being too warm. Periods of sweating in the absence of prior strenuous activity. Record temperature if taken, fever usually indicated by a temperature of 100° F or greater.

Cold	Child feels cold to touch; complains of being cold. Shivers, lips and fingernails blue, "goose bumps" on skin. (Exclude malfunctions of furnace or air conditioning or immediate prior exposure to extreme temperature outside.)
Scratching	Identify body area. Frequent scratching of body parts: scalp, eyes, ears, face, chest, belly, arms, legs, feet, genitals or anal area.
Rash	Any eruption on body with an area of surrounding redness and/or raised bumpy areas.
Diaper rash	Patches of rough red skin or raised bumpy area. May also have patches of raw areas or bright red skin color.
Heat rash	Small minute pimples with a surrounding pink or red area. Commonly seen on the face, neck or body. Frequently appears with overdressing or the day following hot weather.
Cradle cap	A yellowish scale and/or crusting most commonly seen on the scalp during infancy.
Straw colored sores	Raised fluid filled bumpy areas which quickly form straw colored crusty sores. Most commonly seen on the face.
Other	Identify color and characteristics of the rash and body area. Note if rash spreads or changes in consistency. Suspect communicable diseases--chickenpox, measles--may be entered here. Also enter round puffy red patches which spread outward on the skin and sunburn.
Eyes	Discharge - clear or colored and thick; redness on white portion of eye or on eyelid; or swelling of eyelids, crusting of lashes.
Ears	Rubs or pulls at ear; ear may be reddened or appear irritated; discharge; complains of ear hurting; hearing seems affected--doesn't seem to hear, asks to have things repeated, tilts head toward person speaking.

Head	Rubs or holds head, as though in pain; complains of head hurting.
Hair/Scalp	Lice infestation is usually initially observed by the presence of eggs, or nits, clinging to the hair. Scaly patches of baldness on the head are usually due to ringworm.
Nose	Nasal discharge, runny or thick, crusting or reddened area near nostrils, audible "sniffing." A stuffy nose usually presents some difficulty with breathing. Infants with a stuffy nose may have difficulty feeding. Older children with a stuffy nose may complain of dryness and nasal irritation. Frequent sneezing throughout the day with or without nasal discharge. Nosebleed - a bloody discharge from the nostrils.
Mouth/Throat	Swollen gums, rubs teeth or gums, complains of sore mouth, says tooth hurts. White patches in mouth: A cheese-like coating on the tongue inside the mouth. This coating remains when the infant is given water following a feeding. Rubs neck area, complains of pain on talking or swallowing, complains or sore throat. Voice or cry sounds nasal or hoarse. Infant or child breathes through mouth instead of nostrils.
Lungs	Frequent coughing throughout the day. Noisy or difficult breathing is usually heard both breathing in and out. Wheezing is heard primarily on breathing out. The sound has a musical quality and seems to come from the chest, not the nose. Breathing out is prolonged.
Abdomen/Stomach	Vomiting refers to food being brought up forcibly from the stomach. This needs to be distinguished from spitting up, which usually implies small amounts of food coming from the mouth or stomach following feedings, and is not forceful. Child passes gas frequently. Child may rub or hold and complain of abdomen hurting.

Elimination	
Bowel Movements	Frequent - several more stools than usual daily pattern. Loose bowel movements are watery or semi-liquid. Worms are sometimes observed in the bowel movement. Straining and difficulty - hard stools passed infrequently, complains of inability to have a bowel movement, spends a lot of time in the bathroom.
Urination	Frequent urination - more often than usual daily pattern (i.e., in a preschool child, urinating more often than every two hours). Include frequent dribbling. Painful - child complains of burning on urination. Do not include accidental wetting.
Injury	Bruise, burn, cut, bite (human, animal), accident. Note location on child, describe type of injury and cause, if known, under comments. Note any inconsistencies between a non-accidental injury and the stated cause. Record symptoms linked with same injury only one time.
Comments	If symptoms need explanation.

Title: A MODIFIED VERSION OF THE INFANT PSYCHOLOGICAL DEVELOPMENT SCALE

Author: McElroy, Evelyn M.

Variable: An infant's sensorimotor intelligence is the variable being measured. *Sensorimotor intelligence* is defined by the author as "a form of intelligence evolving in the organization of spatial relationships, the organization of objects, including a notion of their permanence, and the organization of causal relationships" (McElroy, 1975).

Description:

Nature and Content: This is an 18-item, modified version of the Uzgiris-Hunt Infant Psychological Development Scale adapted by Kenney, Minard, and McElroy. This scale was designed to assess neonates and consists of four "series." One item from each series is as follows:

Series I—Visual Pursuit and Permanence of Objects (items 1-5):

"1. Target with light in the center. Move it slowly through an arc of 180°. Does infant fixate on the light? (A) Yes___ (B) No___."

Series IV—The Construction of Object in Space (items 6-13):

"6. Target and black circle with lights in center of each stimuli. First presentation, target to the right of circle. Does infant fixate on target? (A) Yes___ (B) No___."

Series III—Development of Schemos in Relation to Objects (items 14-15):

"14. Hold baby bottle 6 inches from the infant, observe eye movements. Does the infant fixate on the bottle? (A) Yes___ (B) No___."

Series V—Localization of an Object by Its Sound in the Waking State (REM sleep, waking, or NREM sleep) (items 16-18):

"17. The infant localizes the source of sound with his eyes. (A) Yes___ (B) No___."

"Yes" and "no" are the response alternatives for each of the 18 items.

Administration and Scoring: The scale must be administered by an investigator trained to reliably judge neonate responses. Two trials are conducted on each of the 18 items, i.e., the first trial is conducted from the infant's right side, the second trial from the infant's left side. Responses are judged "yes" if the infant responds to the stimuli, "no" if he does not.

McElroy (1973) states that approximately 5 minutes are required to complete administration; however, "additional observation time is required if the infant is not in the appropriate state desired for testing."

In addition to copies of the scale, the researcher must have a bull's eye target, a pen light, an apparatus to regulate the blinking of the light, a stop watch, a screen with which to isolate the infant's bassinette, a baby bottle, a tape recorder with the necessary voice recording, and an 8" x 10" sheet of paper (McElroy, 1973).

For scoring, "yes" responses are rated 1; "no" responses are rated 0. Scores are summed to provide a total score for each infant; possible total scores range from 0 to 16 (McElroy, 1973).

Development:

Rationale: The instrument is based on Piaget's theory of sensorimotor intelligence; the final three items of the scale reflect concepts derived from the ontogenetic theory of the function of rapid eye movement (REM) sleep of Roffwarg, Muzio, and Dement (1966).

Source of Items: These items were adapted from the Uzgiris-Hunt Infant Psychological Development Scale (1966).

Procedure for Development: No information was provided.

Reliability and Validity: Some reliability evidence is available—for two groups of neonates the interobserver coefficients of correlation were:

Sample 1	N = 15	0.97
Sample 2	N = 15	0.86

No other specific information was provided, e.g., how many investigators were involved, etc.

One predictive validity estimate was derived based upon McElroy's (1973) testing of 69 neonates with Series I of the Instrument and comparing the scores with maturation. (Maturation was defined by the latency of observed eye movement—LOEM, i.e., the period of time between final eyelid closure and the appearance of rapid eye movements under closed lids.) With age partialed out, the relationship between maturation and the instrument score was $r = 0.31$.

Use in Research: The development and use of the instrument are described in McElroy's (1973) doctoral dissertation and in McElroy and Minard (1976). In her study, McElroy also used Apgar ratings and Dubowitz's instrument for assessing gestational age and maturation of newborns.

Comments: This instrument per se is still in an early stage of development. Reliability and validity need to be established, especially due to the fact that an administration procedure such as this instrument involves, could be subject to a great deal of interrater variation.

References:

McElroy, Evelyn M. *An investigation of the relationship between aspects of maturation and cognitive development among newborn infants.* Unpublished doctoral dissertation, University of Maryland, 1973.

McElroy, Evelyn, and Minard, James. Relationship of REM latency to neonate perceptual-cognitive development: A replicated study of LOEM. *Research Communications in Psychology, Psychiatry, and Behavior*, Jan. 1976.

Roffwarg, Howard, Muzio, Joseph, and Dement, William. Ontogenetic development of the human sleep-dream cycle. *Science*, 1966, 604–619.

Uzgiris, Ina, and Hunt, J. *An instrument for assessing infant psychological development* (mimeograph), University of Illinois, 1966.

Source of Information:

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Instrument Copyright: Evelyn McElroy, R.N., Ph.D.

McElroy, Evelyn M.

A MODIFIED VERSION OF THE INFANT PSYCHOLOGICAL DEVELOPMENT SCALE

A. Series I - Visual Pursuit and Permanence of Objects

1. Target with light on in the center. Move it slowly through an arc of 180°. Does infant fixate on the light?

   A) Yes ___
   B) No ___

2. Does the infant pursue the moving light?

   A) Yes ___
   B) No ___

3. Repeat the procedure with the light flashing. Does the infant fixate on the light flashing?

   A) Yes ___
   B) No ___

4. Does the infant pursue the moving object?

   A) Yes ___
   B) No ___

5. Target with light on. Have the simulus move behind the white 3 x 5 card. Does the infant fixate at the point where the light disappeared?

   A) Yes ___
   B) No ___

B. Series IV - The Construction of Object in Space. (The purpose of this sequence was to observe the development of alternate glancing.)

6. Target and black circle with lights on in center of each stimuli. First presentation, target to the right of the circle. Does the infant fixate on target?

   A) Yes ___
   B) No ___

7. Does infant fixate on black circle?

A) Yes ___
B) No ___

8. Does infant look at both patterns, but switches glances slowly from one to the other (three-four switches per 20 seconds)?

A) Yes ___
B) No ___

9. Does infant look at both patterns, switches the glance quickly from one to the other (five-six switches per 20 seconds)?

A) Yes ___
B) No ___

10. After 20 seconds reverse the procedure. (Black circle will be to the right of the target - lights on.) Does infant fixate on target?

A) Yes ___
B) No ___

11. Does infant fixate on black circle?

A) Yes ___
B) No ___

12. Does infant look at both patterns, but switches glances slowly from one to the other (three-four switches per 20 seconds)?

A) Yes ___
B) No ___

13. Does the infant look at both patterns, switching the glance quickly from one to the other (five-six switches per 20 seconds)?

A) Yes ___
B) No ___

C. Series III - Development of Schemas in Relation to Objects.

14. Hold baby bottle six inches from the infant, observe eye movements. Does the infant fixate on the bottle?

A) Yes ___
B) No ___

15. Move the bottle through a 180° arc. Does the infant pursue the moving bottle?

A) Yes ___
B) No ___

D. Series V - Localization of an Object by Its Sound in the Waking State (REM Sleep, Waking or NREM Sleep)

16. Tape recordings of a male or female voice saying, "Hi, pretty baby" are presented to the infant. Does the infant turn his head to the source of the sound?

A) Yes ___
B) No ___

Place a check mark in the type of recording.

Male's voice _____ Female's voice _____

17. The infant localizes the source of sound with his eyes.

A) Yes ___
B) No ___

18. Infant shows other behavioral change to the recorded voice.

A) Yes ___
B) No ___

Type of behavioral change. ________________________________

Infant's Name ____________ Chart Number ______ Sex ______ Race ______

D.O.B. ____________ Time ____________ Birth Weight ______ Apgar Scores ___

Type of Delivery ______________ Complications ______________

Medication used during delivery ______________________

Prenatal medication ______________________

Anesthesia ______________________

Time of observations ______________________

Testing Conditions (estimate in decibels) ______________________

Sleep Conditions ______________________

Age of infant at testing ______ Score on Dubowitz Scale ______________

Time of last feeding ____________ Amount ingested ______________

Latency REM ______________

Changes in body movement ______________________

Respirations ______________ Type ______________

Excessive movements ______________________

E.D.C. ______________ Gestational Age ______________

Score on Dubowitz Scale Combined score ______ Neurol. ______ External ______

MOTHER'S HISTORY

Chart Number ____________ Age ______ Parity ______________

General Medical History (unusual aspects) mental illness, neurological problems

____

____

Length of Labor ____________ Medications ______________

Smokes ____________ Social Security Number ______________

Breast Feeding ______________ Bottle Feeding ______________

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Title: SLEEP STATUS OBSERVATION FORM

Author: McFadden, Eileen H.

Variables: Nurses' perceptions of a patient's sleep or wakefulness status and selected factors which might influence that status are the variables covered.

Description:

Nature and Content: This is a multipage, multiitem form to be completed by an observer. Five-minute time intervals are listed vertically along the left side of the form, and specific items to be observed and recorded are listed horizontally near the top of the form. The latter includes such items as characteristics of the patient's respirations, purposeful movement by the patient, patient position, patient behavior, medications, environmental factors which might influence the patient's sleep, nursing care activities, etc.

Administration and Scoring: Administration and scoring will depend upon the needs and purposes of the researcher. The author observed the subject during the first minute of each 5-minute interval for the 8-hour period; notes and comments were made as needed for the entire 8-hour time period.

The author-investigator stationed herself outside the door of the patient's room, then entered the patient's room for the time necessary to complete the observation. If a nurse entered a patient's room for either direct or indirect nursing care, the investigator followed to observe and record the resultant activities. Some information, e.g., intake and output, body temperature, etc., may be obtained from patient records. The frequency and duration of uninterrupted sleep periods are calculated based upon data recorded on the observation form.

Development:

Rationale: The instrument was developed to allow the author to document the amount of uninterrupted sleep post open-heart surgery patients received during the fourth, fifth, and sixth postoperative nights. The development of the instrument was based upon a desire to examine the possible relationship between sleep deprivation and postoperative cardiac psychoses.

Source of Items: The items were based upon a review of the literature, the author's professional experience, and consultations with professional peers.

Procedure for Development: The author developed an early form of the instrument, then consulted with intensive care unit nurses to discuss their patient care activities and to review the routine orders for open-heart surgery patients in that care setting. The author also observed these same nurses as they provided care for patients who had experienced open-heart surgery. Changes were made in the instrument based upon those consultations and observations. A second version of the instrument was pretested by the author by using it while observing one open-heart surgery patient. Again, minor changes were made in the instrument.

Reliability and Validity: No information on reliability was available.

Content validity was established by the source from which the items were derived and the procedural steps followed during the instrument's development.

Use in Research: This instrument, along with three others—Sleep Estimate Form, Demographic and Descriptive Data Form, and Prior Sleep Pattern Questionnaire (described elsewhere in this compilation)—were developed and used by McFadden (1968) for a master's thesis entitled *A Study of Sleep Deprivation in Patients Having Open-Heart Surgery*. These instruments, with minor adaptations, were also used by Woods (1969) for her master's thesis, referenced below.

Comments: This instrument is detailed and comprehensive, and the placement of the sequence of observation on the form itself has been carefully planned to facilitate the ease and accuracy of recording. Reliability data are needed, and any potential user should take note of the fact that some items might need to be changed, for they were specific for the setting where the author conducted her study. As it currently stands, the instrument provides a great deal of descriptive data which could be used in studies designed to generate hypotheses for further experimental research.

References:

McFadden, Eileen H. *A study of sleep deprivation in patients having open-heart surgery.* Unpublished master's thesis, University of Washington, 1968.

McFadden, Eileen H., and Giblin, Elizabeth. Sleep deprivation in patients having open-heart surgery. *Nursing Research*, 1971, *20* (3), 249–254.

Woods, Nancy F. *Type of interruptions of sleep and amount of sleep and rest obtained by selected postcardiotomy patients during the first eight post-operative 11 P.M. to 7 A.M.*

periods. Unpublished master's thesis, University of Washington, 1969.

______. Patterns of sleep in postcardiotomy patients. *Nursing Research*, 1972, *21* (4), 347–352.

Source of Information:
Eileen H. McFadden, R.N., M.N.
2237 SE 179th Street
Portland, Oreg. 97233

Instrument Copyright: None.

Mc Fadden, Eileen H.

SLEEP STATUS OBSERVATION FORM

NAME ____________________ POSTOP DAY ____________________

DATE ____________________ PREVIOUS MEDICATION ____________

DATE OF SURGERY ____________

YES = ✓ NS = Not Sleeping
NO = 0 S = Sleeping

Time	General Conclusion	Body Temp.	Eyelids Closed/Slit	RESPIRATION			
				Shallow	Deep	Reg.	Irreg.
11:00							
11:05							
11:10							
11:15							
11:20							
11:25							
11:30							
11:35							
11:40							
11:45							
11:50							
11:55							
12:00							

INTAKE AND OUTPUT

	P.O.	IV	Urine
7- 3			
3-11			
11- 7			

The Patient is

a. responsive to stimuli ____

b. responsive to intense stimuli ____

c. unresponsive ____

Prolonged Insp./Exp.	Post Exp. Pauses	Swallowing	Snoring	Apparent Purposeful Movement	Apparent Awareness of Surroundings

POSITION			BEHAVIOR							LIGHTS			CONVERSATION				
Back	Left Side	Right Side	Rest-less	Calling Out	Mumbling	Blurred, Rambling Speech	Paranoid Indication	Inapp. Responses	Meds	High	Dim	Off	Low	High	Bedside	Other Part of Room	Care of Nearby Patient

NURSING CARE ACTIVITIES

Restraints	2 Plus Leads	0 - 2 Leads	Vital Signs	Strip Chest Tube	N-T Tube Care	Postural Drainage	Cough, Deep Breathe	IPPB	Turn Position	Measure Urine	Irrigate Foley	Bedpan	Fluids Offered	Bed Bath	Sponge Bath	Oral Hygiene	Check IV Tube	Hypo-Blanket	Check Chest Bottles	Check Monitor or Leads	Check H_2O or Oxygen	Dressing Change	Temperature

* A = one person
B = two
C = three
D = four
E = five or more

Daily Weight	Bag & Suction	*People Indirect/Direct At Bedside	Other Comments/Disturbances

Title: RASMUSSEN PAIN DESCRIPTION INDEX (RPDI)

Author: Rasmussen, Susan L.

Variable: The intensity of pain as it can be verbally described is the variable.

Description:

Nature and Content: This self-administered questionnaire consists of two parts. Part I contains space for three items of demographic information and six questions of background information to be answered by circling "Yes" or "No" as appropriate. Two of these six items relate to personal background, four relate to pain-history. Part II contains 10 forced-choice questions designed to elicit very general information about the patient's pain, e.g., occurrence, intensity, relief, and effects. Responses are to be chosen from four choices worded to be appropriate for each question.

Administration and Scoring: No special provisions are needed for administration of the questionnaire. Though the questionnaire was designed to be completed by a patient, it could be administered by interview. Subjects are urged to respond to all of the items. The instrument should not be administered to anyone who has had pain medication within the previous 6 hours.

Answer choices are assigned a numerical value of 1, 2, 3, or 4 depending upon the question, e.g., for question 3, a = 1, b = 2, c = 3, d = 4, for question 4, a = 4, b = 3, c = 2, d = 1. Values were assigned so that a higher value indicated increased intensity of pain. A total score is obtained for each patient; possible scores range from 10 to 40. A scoring key is available from the author.

Development:

Rationale: The instrument is based upon Melzack and Wall's Gate Control Theory of Pain Perception (1965).

Source of Items: The author reported that the instrument is a modification of the Clarke-Spear Analogue Scale and the result of interviews with patients experiencing pain.

Procedure for Development: Based upon the Clarke-Spear Analogue Scale, data reported by Melzack and Torgerson (1971), and interviews with patients experiencing pain, an instrument was developed and pilot tested for content, language, and response alternatives.

The instrument was also reviewed by three nursing experts (Rasmussen, 1974).

Reliability and Validity: No information was provided.

Use in Research: The instrument was developed by Rasmussen (1974) and used in a study with patients complaining of low back pain who were being treated in a pain clinic.

Comments: This instrument is still in a very early stage of development and the author notes that in her use of the instrument:

> Subjects wanted to describe variations of pain verbally that were not included in the Index, wanted to write-in alternate choices despite instructions to the contrary, and asked for assistance from other persons in the pain clinic (Rasmussen, 1974).

This instrument appears to have potential for being developed into a sound instrument to measure a subject's perception of pain. However, at this time, no information on its psychometric properties is available and the author has indicated some of its limitations. Additional testing should include examination of the forced-choice response format.

References:

Clarke-Spear Analogue Scale referred to in: Woodforde, J. M., and Merskey, H. Some relationships between subjective measures of pain. *Journal of Psychosomatic Research*, 1972, *16*, 173–178.

Melzack, R., and Torgerson, W. S. On the language of pain. *Anesthesiology*, 1971, *34*, 50–59.

Rasmussen, Susan Rubin. *Chronic pain: Relationship of personality variables and pain description*. Unpublished master's thesis, University of Illinois, 1974.

Source of Information:

Susan L. Rasmussen, R.N., M.S.
16 Cedar Court
Carrboro, N.C. 27510

Instrument Copyright: None. The author would like to be informed of any research in which this instrument is used.

Rasmussen, Susan L.

RASMUSSEN PAIN DESCRIPTION INDEX (RPDI)

Name ______________________ Age ______ yrs.

Occupation ______________________

Marital Status (circle one answer please)

Single married separated divorced widowed

Background Data:

For the questions below, please circle the correct answer, Yes or No. Please do not write in the margins, but answer each question.

1.	Were you or either of your parents born or raised outside the United States?	Yes	No
2.	Have you completed high school?	Yes	No
3.	Have you ever had surgery on your back to relieve pain?	Yes	No
4.	Have you had more than one surgery on your back?	Yes	No
5.	Have you had back pain for more than one year?	Yes	No
6.	Have you taken pain medication in the past four to eight hours?	Yes	No

Pain Description Items:

For the questions below, please circle the letter of the answer that best describes the pain you have. While the answer may not exactly describe your pain, select the answer that comes closest to your own description and circle the letter. Do not write in the margin or skip questions. You will discuss your pain further with the doctor, but this questionnaire is intended only to give us a rough idea of the pain you have. Move through the questions as fast as you can, but don't skip questions.

Example: How was the temperature when you came in today?

a. hot
b. warm
c. chilly
d. frigid

1. How would you describe your pain as it was when it first occurred?

a. as bad as it could possibly be
b. very bad
c. moderately bad
c. fairly bad

2. How would you describe your pain as it usually occurs?

a. distressing
b. intense
c. bearable
d. excruciating

3. After your pain becomes more intense, how long does it usually last?

a. One to six hours; part of the day
b. six to twelve hours; half a day
c. twelve to eighteen hours; all day
d. eighteen to twenty-four hours; all day and all night

4. When is your pain most intense?

a. all the time
b. off and on; several times a day
c. once or twice a day
d. less than once a day

5. How long does relief last between episodes of pain?

a. no relief at all
b. only brief period; up to eight hours
c. half a day or more; up to sixteen hours
d. a day or more; sixteen to twenty-four hours or more

6. How would you describe your pain as it occurs most of the time?

a. as bad as it could possibly be
b. very bad
c. moderately bad
d. fairly bad

7. How would you evaluate your pain?

   a. annoying
   b. miserable
   c. intense
   d. unbearable

8. How has pain affected your ability to work?

   a. maintain the same work schedule as before
   b. maintain the same work schedule as before, but tire more easily
   c. now do another type of work which is easier
   d. unable to work at all

9. How would you describe your family relationships since pain has been present?

   a. no change noticed
   b. very little change for the better or the worse
   c. definite change for the better or the worse
   d. things are much better or much worse.

10. How would you describe your pain at this moment?

   a. as bad as it could possibly be
   b. very bad
   c. moderately bad
   d. fairly bad

Title: COLORADO MATERNAL HEALTH INDEX

Authors: Waller, Mildred V., Rubbelke, Leona R., and Fahrni, Erma B.

Variable: The variable is the risk status of a pregnant woman. Risk status refers to the likelihood of an unfavorable outcome of a current pregnancy for either the mother or the infant. Unfavorable outcomes of a current pregnancy are defined as: fetal and neonatal deaths, low birth weight, short gestational period, congenital defects and morbid conditions of the newborn, increase in the severity of present chronic conditions in the mother, and obstetrical complication of labor and delivery.

Description:

Nature and Content: The index has five parts: Part I consists of seven demographic items. Part II lists 13 scoreable factors which are empirically related to unfavorable pregnancy outcomes. Each has from two to four fixed responses which have been assigned numerical values in accordance with their predictiveness of an unfavorable outcome. These values appear in parentheses preceding each response.

Other items refer to the patient's marital status, age, religion, blood type and Rh factor, and other aspects of the patient's medical history.

Part III is a checklist of six patient conditions which indicate a high risk of unfavorable outcomes: cancer of the womb, diabetes, german measles, acute urinary tract infection, toxemia, and previous high blood pressure.

Part IV is a 15-item checklist of less important predictors of infavorable outcomes, including serious accident, rape, violence, previous multiple pregnancies, tuberculosis, etc.

Part V is completed after the pregnancy. It provides space for comments and for recording the outcome of the pregnancy for mother and baby.

Administration and Scoring: The instrument is completed by a nurse at the time of the first contact with a pregnant woman and may be used in a health care or home setting. As the nurse completes the required pregnancy record for the health care agency, she may elicit data for the index, since both require the same information.

Nurses are urged to use available data in completing the schedules. Information for the index comes from the interviewer; from laboratory procedures administered, or ordered at the time of the interview, e.g., urinalysis for sugar and albumin, blood pressure, etc.; and from the patient's medical record.

The instrument is scored to provide a risk status category (high, moderate, or low) for each patient. In Part I, the numerical values of weights associated with each response are summed to provide a composite score or risk index. The lower the score, the better the mother's chances of having a favorable outcome for herself and her baby. A high score is predictive of an unfavorable outcome. A composite score of 35 or more places the mother in the high risk category, 26 to 34 places her in the moderate risk category, and 25 or less places her in the low risk category.

Part III supersedes Part II in that the presence of *any* of these conditions in Part III is predictive of an unfavorable outcome and will place the mother in the high risk group regardless of her score on Part II.

The items in Part IV are not scored, but may contribute to the overall determination of risk.

Both predictors and outcomes are described in detail in the instruction manual (Waller et al., 1968).

Development:

Rationale: In the maternal and child health area, where focus is on reduction of the Nation's prenatal mortality rate, there is a need for a system of priorities in order to make the most efficient use of professional services.

The development of an index of maternal risk, which could be used by health care personnel in the identification of pregnant women who have a high likelihood of unfavorable pregnancy outcome, is considered an important step in this effort.

Source of Items: Items were derived from an earlier attempt to predict "high risk" pregnancies (Waller et al., 1968). In the earlier study, data obtained in unstructured interviews with multiparous women and data collected from clinical and medical records for the mother and her newborn were used to select items predictive of unfavorable pregnancy outcomes. Some items of questionable predictive value were retained in the index so that additional data could be collected on them.

Procedure for Development: Revision of the form followed two pretesting periods. Following that, a study of 108 women (gravida 1-10) was conducted in Colorado and Utah (Waller et al., 1968). The data collected were used in the further refinement of the instrument. Some items were eliminated, because they did not adequately discriminate between women whose pregnancies resulted in a favorable outcome, and those whose pregnancies resulted in an unfavorable outcome. Other items were omitted because of their redundancy with items retained. Several items were reduced in detail in order to simplify the index form as much as possible while still retaining a sufficient number of categories for prediction.

Items that did predict pregnancy outcome were placed in two groups. The first of the two groups contained items which were found to associate exclusively with an unfavorable outcome in all but a few cases. Because of the high predictive properties of these conditions (listed in Part III), their presence was given dominance over any other circumstances in assigning a woman to a high risk category.

The second group of items was partially predictive of pregnancy outcomes (listed in Part II). Responses to these items were given a relative weight or predictive value on their degree of association with unfavorable outcomes.

Finally, a group of items were included which were not found to be predictive of outcomes in the study (listed in Part IV). These were selected because they related to conditions not prevalent in the patient study group, but were frequently mentioned in professional literature as having some predictive value.

Reliability and Validity: The patient sample on which the instrument was developed was evaluated using the index to determine maternal risk. Of those who had favorable outcomes, 15 were classified low risk, 21 were classified moderate risk, and 10 were classified high risk. Of those who had unfavorable outcomes, 1 was classified low risk, 11 were classified moderate risk, and 42 were classified high risk.

Use in Research: The index has not been used in other published studies; however, the author did state that the instrument had been used in several master's theses.

Comments: The authors have provided a promising pool of predictors, a set of precise definitions, and a method for systematically collecting data in standardized form—all necessary ingredients for a definitive prediction study. The small sample size of the study does not permit definitive statements at present; however, continuing accumulation of data should reveal an increasingly stable relationship between predictors and outcomes. In the meantime, the index serves an important purpose in classifying women by the probability of risk in pregnancy with some degree of accuracy.

Further cross validation and reliability studies should establish the instrument's discriminatory power (accuracy of prediction).

References:

Waller, M. V., Rubbelke, L. R., and Fahrni, E. B. *The Colorado maternal health index study: Second phase.* Tri-County District Health Department, Aurora, Colorado, 1968.

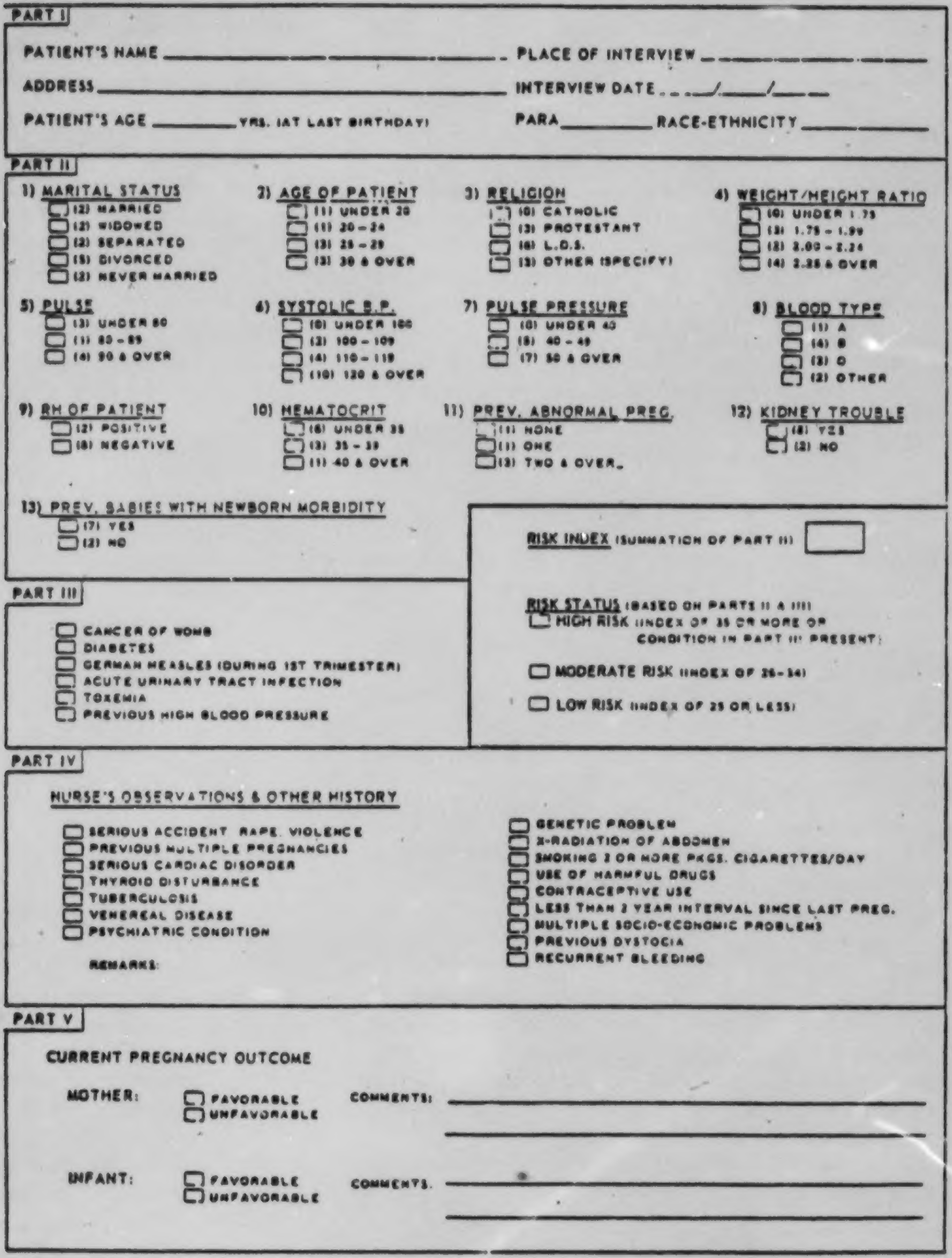
Source of Information:

Mildred V. Waller
6500 East Nevada Place
Denver, Colo. 80224

Instrument Copyright: None.

Waller, Mildred V., Rubbelke, Leona R., and Fahrni, Erma B.

COLORADO MATERNAL HEALTH INDEX



PART I

PATIENT'S NAME ______________________ PLACE OF INTERVIEW ______________

ADDRESS ______________________ INTERVIEW DATE ___/___/___

PATIENT'S AGE ________ YRS. (AT LAST BIRTHDAY) PARA ________ RACE-ETHNICITY ________

PART II

1) MARITAL STATUS
- ☐ (2) MARRIED
- ☐ (2) WIDOWED
- ☐ (2) SEPARATED
- ☐ (5) DIVORCED
- ☐ (2) NEVER MARRIED

2) AGE OF PATIENT
- ☐ (1) UNDER 20
- ☐ (1) 20 – 24
- ☐ (3) 25 – 29
- ☐ (3) 30 & OVER

3) RELIGION
- ☐ (0) CATHOLIC
- ☐ (3) PROTESTANT
- ☐ (6) L.D.S.
- ☐ (3) OTHER (SPECIFY)

4) WEIGHT/HEIGHT RATIO
- ☐ (0) UNDER 1.75
- ☐ (2) 1.75 – 1.99
- ☐ (2) 2.00 – 2.24
- ☐ (4) 2.25 & OVER

5) PULSE
- ☐ (3) UNDER 80
- ☐ (1) 80 – 89
- ☐ (4) 90 & OVER

6) SYSTOLIC B.P.
- ☐ (0) UNDER 100
- ☐ (2) 100 – 109
- ☐ (4) 110 – 119
- ☐ (10) 120 & OVER

7) PULSE PRESSURE
- ☐ (0) UNDER 40
- ☐ (5) 40 – 49
- ☐ (7) 50 & OVER

8) BLOOD TYPE
- ☐ (1) A
- ☐ (4) B
- ☐ (3) O
- ☐ (2) OTHER

9) RH OF PATIENT
- ☐ (2) POSITIVE
- ☐ (8) NEGATIVE

10) HEMATOCRIT
- ☐ (6) UNDER 35
- ☐ (3) 35 – 39
- ☐ (1) 40 & OVER

11) PREV. ABNORMAL PREG.
- ☐ (1) NONE
- ☐ (1) ONE
- ☐ (3) TWO & OVER

12) KIDNEY TROUBLE
- ☐ (8) YES
- ☐ (2) NO

13) PREV. BABIES WITH NEWBORN MORBIDITY
- ☐ (7) YES
- ☐ (2) NO

RISK INDEX (SUMMATION OF PART II) ☐

RISK STATUS (BASED ON PARTS II & III)
- ☐ HIGH RISK (INDEX OF 35 OR MORE OR CONDITION IN PART III PRESENT)
- ☐ MODERATE RISK (INDEX OF 26–34)
- ☐ LOW RISK (INDEX OF 25 OR LESS)

PART III

- ☐ CANCER OF WOMB
- ☐ DIABETES
- ☐ GERMAN MEASLES (DURING 1ST TRIMESTER)
- ☐ ACUTE URINARY TRACT INFECTION
- ☐ TOXEMIA
- ☐ PREVIOUS HIGH BLOOD PRESSURE

PART IV

NURSE'S OBSERVATIONS & OTHER HISTORY

- ☐ SERIOUS ACCIDENT, RAPE, VIOLENCE
- ☐ PREVIOUS MULTIPLE PREGNANCIES
- ☐ SERIOUS CARDIAC DISORDER
- ☐ THYROID DISTURBANCE
- ☐ TUBERCULOSIS
- ☐ VENEREAL DISEASE
- ☐ PSYCHIATRIC CONDITION
- ☐ GENETIC PROBLEM
- ☐ X-RADIATION OF ABDOMEN
- ☐ SMOKING 2 OR MORE PKGS. CIGARETTES/DAY
- ☐ USE OF HARMFUL DRUGS
- ☐ CONTRACEPTIVE USE
- ☐ LESS THAN 2 YEAR INTERVAL SINCE LAST PREG.
- ☐ MULTIPLE SOCIO-ECONOMIC PROBLEMS
- ☐ PREVIOUS DYSTOCIA
- ☐ RECURRENT BLEEDING

REMARKS:

PART V

CURRENT PREGNANCY OUTCOME

MOTHER: ☐ FAVORABLE ☐ UNFAVORABLE COMMENTS: ______________

INFANT: ☐ FAVORABLE ☐ UNFAVORABLE COMMENTS: ______________

Title: PATIENT WELFARE INVENTORY

Authors: Wolfer, John A., Eisler, Jeanne, and Diers, Donna

Variable: The instrument was designed to provide information on the day-to-day emotional status of a patient as he(she) recovers from surgery.

Description:

Nature and Content: This self-report inventory consists of 20 adjectives which are presumed to be descriptive of the range of emotions a patient may experience during hospitalization, e.g., comfortable, depressed, tense, hopeful, etc. The patient is asked to rate each adjective on a 6-point scale to indicate the extent to which each describes his(her) feelings for that day. The scale extends from "not at all" to "very much." There is also one summary item which asks, "How low or high are your general spirits?" This, too, is rated on a 6-point scale from "very low" to "very high."

Administration and Scoring: No special provisions are necessary for administration. Approximately 7 minutes are required for completion of the instrument.

The 6 points on the rating scale are assigned values as follows: not at all = 1; very much = 6; values of 2, 3, 4, and 5 are assigned to the respective intervening categories. The scores for all adjectives are summed to provide a total score for each patient.

Development:

Rationale: The instrument is based on a holistic view of man and the psychosomatic approach to illness which holds that the process of physical recovery is influenced by the patient's psychosocial status.

Source of Items: The adjectives contained in the instrument are a slightly revised version of the Moods and Feelings Inventory developed by Wolfer and Davis (1970), and are based on the recommendations of experienced medical and surgical nurses and their patients.

Procedure for Development: No information was provided.

Reliability and Validity: No information was provided regarding the reliability of the instrument.

Pearson correlations were computed between the total score derived from this instrument, the Social Desirability Score, and the nurses' ratings of patients' emotional states for each day patients were in the hospital. The correlations between the total score and Social Desirability ranged from −0.08 to 0.11, depending upon the day. The correlations between the nurses' ratings and the total score derived from this instrument ranged from 0.41 to 0.56, depending upon the day. The total score was also examined in terms of such variables as the sex of the patient and the nurse who made a rating. No significant differences were reported as a function of such variables.

Use in Research: Eisler et al. (1972) used this instrument, along with the Crowne and Marlowe (1964) Social Desirability Scale and the Recovery Inventory, in a study which included 64 adult surgical patients (32 males and 32 females).

Comments: Before the strengths and weaknesses of the instrument can be fairly assessed, more information is needed—i.e., the variable should be conceptually defined clearly, and the reliability and validity of the instrument determined. Since it is possible that the words contained in this instrument may differentially contribute to the total score, it would be helpful to have information regarding the inter-item characteristics of the instrument.

Finally, given that the information derived from this instrument was designed to be used to examine the effects of nursing care upon the emotional state of a patient, it would be important to have data that would make it possible to examine the relationship between several methods of obtaining this latter data and different levels of quality of nursing care.

References:

Crowne, D. P., and Marlowe, D. *Approval motive: Studies in evaluative dependence.* New York: John Wiley and Sons, 1964.

Eisler, Jeanne, Wolfer, John A., and Diers, Donna. Relationship between need for social approval and postoperative recovery and welfare. *Nursing Research*, 1972, *21*, 520–525.

Wolfer, John A. Definition and assessment of surgical patients' welfare and recovery. *Nursing Research*, 1973, *22*, 394–401.

Wolfer, John A., and Davis, Carol E. Assessment of surgical patients' preoperative emotional condition and postoperative recovery. *Nursing Research*, 1970, *19*, 402–414.

Source of Information:

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Instrument Copyright: None.

Wolfer, John A., Eisler, Jeanne, and Diers, Donna

PATIENT WELFARE INVENTORY

	NOT AT ALL					VERY MUCH
COMFORTABLE						
PLEASED						
WORRIED						
UNCERTAIN						
RELIEVED						
WEARY						
DEPRESSED						
SATISFIED						
TENSE						
ANNOYED						
CONFIDENT						
RELAXED						
FRUSTRATED						
UNEASY						
HOPEFUL						
FRIGHTENED						
CONTENT						
MISERABLE						
PEACEFUL						
ENCOURAGED						

HOW LOW OR HIGH ARE YOUR GENERAL SPIRITS?

VERY LOW					VERY HIGH

Client Biopsychosocial Health Status: General

Title: BEHAVIOR RATING SCALE

Author: Brink, Pamela J.

Variable: Behavior defined as any verbal or nonverbal action of hospitalized inpatient heroin addicts mentioned by the nursing staff either in the nursing notes or in staff conferences is the variable.

Description:

Nature and Content: This is an observer-completed, three-page instrument designed to identify the presence or absence of 50 behavioral characteristics or acts. The characteristics are itemized and categorized as follows: (1) sleep habits—7 items, (2) activities—11 items, (3) elimination—5 items, (4) socialization—3 items, (5) eating habits—5 items, (6) grooming—4 items, and (7) behaviors—15 items. Most of the acts listed are negative. The rating scale is divided into columns for use by the night, day, and afternoon shifts of the nursing staff.

Administration and Scoring: A copy of the instrument is attached to the front of each patient's chart by the night duty charge nurse. Each member of the nursing staff assigned to the particular patient for that day and that shift is asked to check off those behaviors that occur at least once during his(her) tour of duty. The rating scale provides space for a check if the behavior has been present and no check if the behavior has not been present. Space is provided at the end of the scale for additional comments about the patient by staff of any of the three shifts. Special notes are requested for type of activity in which the patient participated in occupational therapy and recreational therapy, the time at which the patient arrives for meals, and type of activity engaged in when present on the ward.

A simple tabulation of the presence or absence of a particular behavior is made for each patient for each hospital day. Whether the behavior is noted once or three times, the activity is simply scored as having occurred that day.

Since all patients are not admitted at the same time, each rating scale is filled out for the day of hospitalization. A simple tabulation is made of each behavior exhibited by each addict for each hospital day. Each behavior for each day is then tabulated in percentages according to the number of rating scales completed for that day. All behaviors are then given a scale value according to the percentage of patients displaying that behavior on any given day. If a behavior occurs in more than 75 percent of the patient population, the behavior is given a behavioral value of 5; from 50 to 74 percent, a behavioral value of 4; 30 to 49 percent, a behavioral value of 3; from 15 to 29 percent, a behavioral value of 2; and for less than 15 percent, but more than zero, the assigned behavioral value is 1.

The sum of each behavioral value for each day provides the scale value. The highest possible scale value is 25 if more than 75 percent of the patients displayed this behavior for 5 days, while the lowest scale value is 1 if less than 15 percent of all patients displayed this behavior on 1 hospital day. The behaviors are then ranked according to the scale value.

Subscores are attained by tabulating scale value for male versus female patients and for each hospital day.

Development:

Rationale: An initial pilot project was carried out as a result of staff complaints of the behavior of heroin addicts on an acute care inpatient psychiatric facility. Although there had been numerous consultations around this patient population and a nursing-care plan developed by the staff, the complaints continued. The pilot project, however, did not yield data about addicts' behaviors which could account for the staff's continuing unrest. At the time, there was no literature available on this type of detoxification program, nor on staff-patient problems in and around such a program. A study was devised which would investigate addict behavior and staff attitudes. This instrument was designed to elicit characteristic behavioral patterns of an addict population in order to have sufficient data on which to plan nursing care.

Source of Items: The items were based upon nursing notes, the specific nursing care plans for the addicts, and comments made by staff members at staff meetings about addict behaviors.

Procedure for Development: The instrument was designed by the author in consultation with two clinical nurse specialists who had been or were involved with a particular hospital ward. The instrument was developed as a pilot instrument to test its feasibility.

Reliability and Validity: No reliability coefficients have been established for the instrument. The instrument has content validity in that the behaviors listed are representative of all of the usual behaviors (or lack of) seen on such a ward, and all of the behaviors listed had been observed by a member of the staff.

Use in Research: A complete report of the findings of the study in which this instrument was used can be found in the articles referenced below.

Comments: Brink (Personal Communication) reported that:

> Several problems arose with the use of this instrument. First of all, the rating scale was scored by staff nurses who were not supervised during the period of the study. Gross errors can be estimated from this scoring procedure. Many gaps in the data were apparent from the raw data—comments were not consistent, nor were requested pieces of information elicited. I would recommend that anyone using this instrument train research assistants to collect the needed data.
>
> In reviewing the published article, I have found a gross statistical error in the rank ordering of the scale values. The rank ordering had not been done properly, i.e., tied scale values were incorrectly rank ordered.
>
> Finally, I would recommend a test-retest reliability test in the form of repeated observations to develop a beginning estimate of the reliability of the instrument.

Any potential user will need to examine the scoring system carefully and critically, and, as the author suggested, determine the instrument's reliability. However, it can provide an initial starting point for the investigator interested in the same aspects of behavior covered by this instrument.

References:

Brink, Pamela J. Behavioral characteristics of heroin addicts on a short-term detoxification program. *Nursing Research*, 1972, *21* (1), 38–45.

______. Heroin addicts: Patterns of behavior during detoxification. *Journal of Psychiatric Nursing and Mental Health Services*, March-April 1972, 12–18.

Source of Information:

Pamela J. Brink, R.N., Ph.D.
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Instrument Copyright: None.

Brink, Pamela J.

BEHAVIOR RATING SCALE

SLEEP HABITS:	NIGHT SHIFT	DAY SHIFT	AFTERNOON SHIFT
1. Retired after midnight.			
2. Slept with intervals.			
3. Drowsy during day.			
4. Slept late in A.M.			
5. In bed - awake.			
6. In bed - asleep.			
7. Restless during sleep.			
ACTIVITIES:			
1. Attends morning meeting.			
2. Attends addict meeting.			
3. Attends OT.			
4. Works on OT project.			
5. Attends R.T.			
6. Specify activity in R.T.			
7. Watching TV on ward.			
8. Playing cards & other games.			
9. Off ward to movie or dance.			
10. Plays ping pong on ward.			
11. Specify on-ward activity.			
ELIMINATION:			
1. Constipation.			
2. Diarrhea.			
3. Urine specimen obtained			
4. Routine.			
5. Suspected drug use.			

NUMBER ____________________

DATE ____________________

	NIGHT SHIFT	DAY SHIFT	AFTERNOON SHIFT
SOCIALIZATION:			
1. Talks with other addicts.			
2. Talks with other patients.			
3. Talks with staff.			
EATING HABITS:			
1. Regular diet.			
2. Attends meals (note time).			
3. Attends snacks (note time).			
4. Has second helpings.			
5. Eats at other times.			
GROOMING:			
1. Bath.			
2. Shave.			
3. Shampoo.			
4. Neat and clean looking.			
BEHAVIORS:			
1. Listless and apathetic.			
2. Alert and aware of surroundings.			
3. Angry verbalizations.			
4. Angry at staff.			
5. Angry at patients.			
6. Physical aggression to others.			
7. Physical aggression to property.			

NUMBER ____________________

DATE ____________________

	NIGHT SHIFT	DAY SHIFT	AFTERNOON SHIFT
8. Requests medications when not due.			
9. Requests medications when staff busy.			
10. Accuses staff of omitting given medications.			
11. Accused of harrassing other patients.			
12. Becomes irritable when meds. not given on request.			
13. Questions when meds. are due-threatens to leave AMA.			
14. Questions nurse's judgment.			
15. Threatens to report nurse's behavior to physician.			

Title: POSTOPERATIVE CONVALESCENCE QUESTIONNAIRE

Author: Elms, Roslyn R.

Variables: This instrument provides information on four variables: physical complaints and discomforts; physical independence; social interaction and diversional activity; and emotional response. The other items are basically transition items. Note that the published paper (Elms, 1972, p. 393) refers to the emotional response items as Section D. This was done in order to avoid a sequence of A, B, C, E, which would have been confusing to the reader.)

A fifth variable, called the Patient Convalescence Score (PCS) is derived by averaging scores on the four variables over the period of hospital confinement.

Description:

Nature and Content: The Postoperative Convalescence Questionnaire is made up of 46 questions that provide information about a variety of experiences patients are likely to have while in a hospital and how they feel about these experiences. *Physical complaints and discomforts* is operationalized by combining responses to 15 questions, such as "How well did you sleep last night?" *Physical independence* is made up of responses to nine questions, such as "Did you comb your hair today or did someone else do it?" *Social interaction and diversional activity* is operationalized by responses to eight questions such as "What have you been doing most of the day?" *Emotional responses* is made up of responses to 10 questions, such as "Have you felt depressed, sad, or like crying today?" The Patient Convalescence Score (PCS) was derived from the scores computed for the other four variables.

The questionnaire employs forced choice alternatives, and the number of response categories provided for responses to the questions contained in this instrument range from two to six.

Administration and Scoring: This instrument is designed to be administered to a patient by an interviewer. Interviews range from 15-30 minutes, depending upon the condition and cooperation of the patient. Approximately 15-20 hours are required to train interviewers in the use of the tool.

Scores on each variable represent the mean score on responses to each of the variable categories, i.e., *physical complaints and discomforts* (instrument items coded with the letter A); *physical independence* (instrument items coded with the letter B); *social interaction and diversional activity* (instrument items coded with the letter C); *emotional responses* (instrument items coded with the letter E). Items on the instrument whose numbers are circled are not scored. Response categories were assigned numerical values for quantitative analysis, but no further information was provided on the numerical values assigned to questionnaire items and response categories. The Patient Convalescence Score (PCS) is obtained by combining the mean values obtained on each questionnaire administered to the patient and then dividing by the total number of interviews the patient received.

Development:

Rationale: This instrument was developed to provide information that could be used to explore the relationship between recovery room behaviors and postsurgical patterns of recovery.

Source of Items: The questions in this test were developed by the author and modeled upon previous work described in Abdellah et al. (1961), Henderson (1964), and a report from the University of Iowa (1960).

Procedure for Development: The questions were administered by an interviewer to 60 patients at the Parkland Memorial Hospital, Dallas, Texas. Approximately one-third of the patients were men. They ranged in age from 18 to 82 years. A wide variety of surgical procedures having a variety of risk had been performed on the patients. The scores derived from the instrument, were related to those derived from the Recovery Room Activity Schedule (Elms, 1972, see elsewhere in this publication), and to common medical measures of convalescence such as postoperative fever days, frequency of pain medications, postoperative complications, and length of postoperative hospitalization.

Reliability and Validity: The validity of the data collected with the Postoperative Convalescence Questionnaire was tested by collecting similar data on a Nurse Evaluation Questionnaire. Nurse perceptions of patient behavior were coded as NES and were highly correlated with the PCS ($r = + 0.82$) which resulted from patients' self-reports.

None of the patient convalescent measures accounted for as much as 10 percent of the variance of the variables derived from the Recovery Room Activity Schedule. However, the Patient Convalescence Score (PCS) was substantially related ($r = 0.66$ and $r = 0.60$) to the number of postoperative fever days and to the degree of surgical trauma, respectively. The PCS was also moderately related to length of postoperative hospitalization ($r = 0.35$), and to postoperative complications ($r = 0.33$). No differences were observed between the five measures derived from this instrument and such variables as sex, age, and race. Previous research (Menzer et al., 1957) suggested that there would be a relationship between the Patient Convalescence Score and vomiting in the recovery room. No such differences were observed in these data.

Use in Research: Elms's (1972) use of the instrument is described in the reference cited below.

Comments: The instrument appears to have a potential for providing information on the variables it is designed to measure. The relationship observed between the Patient Convalescence Score and medical variables such as degree of surgical trauma suggests that that measure, at least, is providing information congruent with what would be expected. However, since the items used to compute each score have a variety of answer choices, it is possible that they are differentially contributing to the total scores for each variable. If information were available regarding the inter-item relationships of the various items, within and across these measures, it would be possible to eliminate "weak" items and to capitalize upon or differentially weight those items that were really contributing strongly to the actual variability on these measures. This might also result in a reduction in the number of items required to gather useful information, and it would thus take less time to administer this instrument to patients. The sample of patients is also sufficiently small to make it worthwhile to try to replicate these results on a larger sample of patients.

The fact that there was a fairly large amount of agreement between nurses' and patients' perceptions of parts of these measures suggests that the measures are likely to be stable across short intervals of time. However, approximately 30 percent of the variance on the Patient Convalescence Score is not accounted for. Therefore, it would be useful to have additional information on the short-term, test-retest characteristics of these measures.

References:

Abdellah, Faye, Beland, June, Martin, Almeda, and Matheney, Ruth. *Patient-centered approaches to nursing.* New York: Macmillan Co., 1961.

Elms, R. R. Recovery room behavior and postoperative convalescence. *Nursing Research*, 1972, *21*, 390–397.

Henderson, V. Nature of nursing. *The American Journal of Nursing*, 1964, *64*, 62–68.

Menzer, Doris, Morris, Thomas, Gates, Phillip, Sabbath, Joseph, Robey, Harriet, Plout, Thomas, and Sturgis, Somers. Patterns of emotional recovery from hysterectomy. *Psychosomatic Medicine*, 1957, *19*, 379–388.

University of Iowa, Nurse Utilization Project Staff. *An investigation on the relation between nursing activity and patient welfare.* Principal investigators, M. K. Aydelotte and M. E. Tener. Iowa City: State University of Iowa, 1960.

Source of Information:

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Instrument Copyright:

The American Journal of Nursing Company
10 Columbus Circle
New York, N.Y. 10019

Elms, Roslyn R.

POSTOPERATIVE CONVALESCENCE QUESTIONNAIRE

Questions with * are those questions also asked of the patient's nurse, in order to test validity. Circled items are no score questions.

*1E.	Would you say you felt .... today?	1E.	better than you expected	____
			about as you expected	____
			worse than you expected	____
*1A.	How well did you sleep last night?	1A.	very well	____
			moderately well	____
			poorly	____
2A.	Did you take a sleeping pill?	2A.	yes	____
			no	____
			don't know	____
3A.	Did you request one or did the nurse give it to you without asking?	3A.	requested	____
			not requested	____
4A.	Have you had any pain in your incision today? How severe was the pain?	4A.	no pain	____
			slight amount	____
			moderate amount	____
			severe amount	____
*5A.	How often did you have pain?	5A.	most of the time	____
			frequently	____
			occasionally	____
			rarely	____
			no pain	____
6A.	When did the pain occur?	6A.	usually when resting	____
			usually when moving in bed	____
			usually when getting out of bed	____
			usually when walking around	____
			no pain	____
7A.	Were you able to ease the pain yourself? How? (remarks)	7A.	yes	____
			no	____

*8A.	About how amny times did you ask for pain medication?	8A.	# of times ____
*9A.	Most of the time, did the medicine relieve the pain? How well?	9A.	none given ____ completely ____ almost completely ____ some ____ not at all ____
*1B.	When you took your bath this morning did you do it alone or with help?	1B.	alone in BR ____ alone at bedside ____ in BR with help ____ in bed with help ____ given bedbath ____ refused bath ____
*2B.	Did you comb your hair today or did someone else do it? Did you ask that it be done?	2B.	not combed ____ someone else without request ____ someone else with request ____ self combed ____
*3B.	Did you use the BR or BP today? Alone or with help?	3B.	alone to BR ____ help to BR ____ BP without help ____ BP with help ____ incontinent or cathed ____ cath for urine & BR for bowels ____
*4B.	Did you get out of bed today? Did you dangle? (How extensive was ambulation?)	4B.	bedrest ____ dangled ____ up to BR only ____ up in chair only ____ ambulated (short walks) ____ up ad lib ____
5B.	Would you describe how easy or hard it was for you to get up or dangle?	5B.	bedrest ____ easy ____ slightly difficult ____ moderately difficult ____ very difficult ____

				Dangle	Walk
*6B	Did you dangle or walk ...	6B.	alone	____	____
			with a little help	____	____
			with quite a bit of help	____	____
*7B.	Did the nurse have to make you get up?	7B.	yes		____
			no		____
*1C.	Where have you spent most of your time today?	1C.	bed		____
			chair in room		____
			walking around		____
			on sunporch		____
*2C.	What have you been doing most of the day?	2C.	sleeping		____
			awake doing nothing		____
			thinking		____
			reading or watching TV		____
			talking with people		____
3C.	Have you been bored today?	3C.	yes		____
			no		____
4C.	What would you like to be able to do to occupy your time?	4C.	Write suggestions patient makes.		
*5C.	Did you have any visitors yesterday?	5C.	yes		____
			no		____
*6C.	Did you visit with any patients or go to the coffee shop today?	6C.	yes		____
			no		____
10A.	How would you describe your appetite today?	10A.	not hungry		____
			a little hungry		____
			fairly hungry		____
			very hungry		____
*11A.	How much food did you eat today? (includes liquids)	11A.	not served any		____
			ate nothing on tray		____
			some		____
			more than 1/2		____
			everything on tray		____

*8B.	Were you able to feed yourself or did you need help?	8B.	self ____ help to position tray ____ help to cut food, etc. ____ needed to be fed ____ unable or refused ____
*9B.	Were you able to move in bed today by yourself or did you need help?	9B.	self ____ help ____
12A.	Have you felt tired or energetic today? How much?	12A.	tired energetic slightly ____ slightly ____ moderately____ moderately ____ very ____ very ____ DK or neither ____
*2E.	Have you felt depressed, sad, or like crying today? (Cried?) How badly were you feeling? What was it that was bothering you?	2E.	no ____ a little ____ moderately ____ very ____
*3E.	Did you care how you looked today?	3E.	yes ____ no ____
4E.	Do you think that this operation will change your life in any way? In what way?	4E.	limit ____ enhance ____ DK ____
5E.	Are you glad that you had this operation now that it is over?	5E.	yes ____ no ____
6E.	Do you feel satisfied or impatient about the progress you are making?	6E.	satisfaction ____ impatience ____ neither ____
*7E.	How do you think you are progressing?	7E.	a little slowly ____ about average ____ very well ____
*13A.	Has your IV tube (or any other tubes the pt. may have) been bothering you today? How much? Did you pull any out?	13A.	no tubes ____ not bothering pt. ____ a little bothersome ____ somewhat bothersome ____ very bothersome ____ pulled tube out ____

*14A.	Today have you vomited	14A.	yes ____	no ____
	felt nauseated		yes ____	no ____
	felt dizzy		yes ____	no ____
	had any muscle soreness		yes ____	no ____
*8E.	Have you felt restless, worried, or nervous about anything today? About how nervous (etc.) did you feel? Tell me what it was that troubled you.	8E.	no	____
			a little	____
			some	____
			very	____
*7C.	Did you follow the instructions you received from the doctor or nurses today?	7C.	not given any	____
			yes	____
			no	____
			somewhat	____
*8C.	Did you help any of the other patients on the ward today? How?	8C.	yes	____
			no	____
*15A.	Today have you had a ...	15A.		
	sore throat		yes ____	____
	gas pains		yes ____	____
	diarrhea		yes ____	____
	constipation		yes ____	____
	headache		yes ____	____
1D.	Did anything happen today that pleased you? What was it?	1D.	yes	____
			no	____
*9E.	Did you feel upset, angry, or annoyed at anything today? How much? What was it that bothered you?	9E.	no	____
			a little	____
			moderately	____
			very	____
10E.	Are you sorry that you had this operation? Can you tell me what makes you feel that?	10E.	yes	____
			no	____
*2D.	Have you asked the doctors or nurses any questions today? About how many? About what?	2D.	yes	____
			no	____
			one	____
			a few	____
			some	____
			many	____

3D.	Do you feel that you get straight (clear) answers from them? (Will you explain that more clearly for me.)	3D.	yes no DK	___ ___ ___
4D.	Do you think you were given enough information about the hospital routines, that is the rules and regulations of the hospital? What other information do you think would be helpful?	4D.	yes no not given any	___ ___ ___

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Title: SOCIAL AND PSYCHOLOGICAL STATUS OF MYOCARDIAL INFARCTION PATIENTS DURING RECOVERY EVALUATION QUESTIONNAIRE

Author: Garrity, Thomas F.

Variables: This instrument measures three aspects of a respondent's social and psychological status during recovery from myocardial infarction: (1) his perceptions of his health, (2) his social functioning in structured and unstructured activities, and (3) his self-reported morale. *Perception of health* is measured by asking the patient about psychophysiological symptoms as well as the condition of his heart and his overall health. *Social functioning* is measured in terms of nine activity areas: work, participation in community organizations, volunteer work, visiting friends and relatives, watching television, reading, sitting around doing nothing, working on hobbies, and sleeping. *Overall morale* is determined by self-assessment on a happiness/sadness, 10-point continuous scale. The instrument is designed to tell something about the longitudinal trend in the patient's life by asking the respondent to compare his current status with his past and estimated future status.

Description:

Nature and Content: Most of the approximately 80 items on this self-report questionnaire are designed to yield scoreable data on one of the three general areas listed above. However, some of the questions are preparatory items yielding factual data which lead the respondent into comparative items on the same topic. A few questions yield information generally relevant to one of the areas, such as new health problems of the patient or comparison of his income before and after his heart attack.

The 19 items, tapping the respondent's perceptions of his health, ask about the presence or absence of a number of symptoms thought to be indicative of psychophysiological disability. Such items as "dizziness" and "trouble sleeping" can be checked as absent, occasionally present, or frequently present. These are scored 0, 1, or 2, respectively, with a high score indicating a high degree of psychophysiological disability. A second measure of health perception is a dichotomous variable in which the respondent, after answering a number of preparatory multiple-choice questions about symptoms of heart trouble which he may have in varying degrees, relates his assessment of his heart's condition as either good to fair, or poor. The item is scored 1 for good to fair, and 2 for poor. The third health perception variable is an overall measure of health status requiring the respondent to place himself on a 10-point scale (or "ladder") ranging from 0 (poorest health) to 9 (best health) at the present time, just before his heart attack, at the time of his discharge from the hospital, and 6 months from then. He is also asked to rate the health of the average man his age on the same scale.

In the area of social functioning, the respondent is first asked to record the time he spends in an average day or week in each of the nine activity categories. He is then asked to compare current involvement in the various activities with preattack involvement. The possible answers of "currently involved less," "about the same," or "more" than before the attack are scored 1, 2, and 3, respectively, for each of the activity areas. Finally, after questions about his job and income, the respondent is asked to rate his activity level and his social life on two 10-point scales similar to the one used in the health perception variable.

Morale is measured on the same type of 10-point scale ranging from "saddest" to "happiest" on which the respondent places himself at the same times as listed above. This is a single-item index which gets at overall morale rather than feelings about various aspects of the respondent's life. The last item of the instrument asks the respondent to rate his degree of worry about his health on a 7-point scale from "not worried" to "very worried." He rates this degree for himself (currently, before his attack, and at time of discharge from the hospital), for the average man his age, and for his family.

Administration and Scoring: The wording of the instrument indicates that it is to be administered 6 months after the patient has been discharged from the hospital.

Since the instrument was devised to study correlation or the lack of correlation among the three major variables, as well as with the physical status of the patient, no overall score is determined for the patient. Scoring for each of the three aspects of social and psychological status is possible, although scoring instructions are provided only for the individual items noted in the description. Perhaps this is because the author found that, in most instances, correlation among item-clusters measuring the same variable was high enough to warrant inclusion of only one measure for each dimension. (See "Procedure" below).

Development:

Rationale: It is generally recognized that adjustment after myocardial infarction occurs along several dimensions, including the physical, emotional, and social. However, there is a concomitant belief—possibly unfounded—that the various dimensions are highly correlated. This assumption has led researchers, physicians, and laymen alike to stress single dimensions of recovery, usually the physical, and to ignore other aspects of recovery and their interrelationships. This questionnaire was designed to tap rehabilitation data and to cover the variables of interest in studies seeking to examine the interrelationship of physical, social, and psychological adjustment of patients who have suffered myocardial infarction.

Source of Items: The 19-item psychophysiological disability section of the questionnaire was based on Langer's (1962) 22-item screening score of psychiatric impairment. The items using the 10-point "ladder" scale, such as the morale scale, are similar to Cantril's (1965) self-anchoring striving scale.

Procedure for Development: Information on the procedure for developing the original items of the questionnaire was not provided. However, in one study (Garrity et al., 1972) in which the ultimate objective was to examine the relationship among the physical, social, and psychological recovery dimensions, it seemed desirable to reduce the separate measures of the questionnaire to the smallest possible number of logically and empirically justifiable dimensions. To this end, the various measures of psychological and social adjustment were each factor analyzed, using a principal components solution, to see if they could be reduced to fewer measures—ideally, to one measure for each dimension. The three health perception variables were found to be reducible to a single weighted measure. In the factor analysis of the nine social functioning variables, two significant factors emerged: (1) involvement in structured activities such as work, participation in community associations, and volunteer work; and (2) involvement in unstructured activities such as reading, watching television, sitting around doing nothing, and the like. The single measure of morale did not need any data reduction.

Reliability and Validity: No reliability data were provided.

Some factorial validity of the instrument is reflected in the following intercorrelation data from Garrity (1973a):

	Variables	IIA	IIB	III
I	Health	0.33*	0.01	0.62*
IIA	Social Involvement (Structured)		0.06	0.12
IIB	Social Involvement (Unstructured)			0.04
III	Morale			

* $p < 0.01$: N = 56

Use in Research: Garrity used this instrument in his 1973 study "Social Involvement and Activeness as Predictors of Morale Six Months After First Myocardial Infarction." In addition, the questionnaire was used as a base for the Garrity et al. (1972) study "Physical, Social, and Psychological Dimensions of Recovery After Myocardial Infarction: A Correlational Study."

Comments: The possibilities for effective psychological intervention with coronary patients will be improved if the dimensions and scope of the behavioral problems are recognized and dealt with. Refinement and continued use of instruments of this type, perhaps coupled with more general personality measures, could lead to improved management and rehabilitation of the coronary patient and ultimately to the prediction and prevention of further attacks.

The health information section of the instrument could be strengthened by replacing responce choices "a few times" and "often" with a range of numbers; this would increase the instrument's reliability. Other items which now elicit descriptive data could be refined, and a scoring system developed which would lead to the collection of quantifiable data.

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Garrity, Thomas F., and Klein, Robert F.

SOCIAL AND PSYCHOLOGICAL STATUS OF MYOCARDIAL INFARCTION PATIENTS DURING RECOVERY EVALUATION QUESTIONNAIRE

Name________________________________

Date________________________________

We are very interested in learning of your progress since you left the hospital six months ago after your heart attack. The questions in this questionnaire deal with your present condition in the areas of health, work and leisure activities, and morale.

Please try to answer all of the questions, since each question gives us important information about you. Although some questions will seem difficult to answer, we hope you will try an 'educated guess' for these.

Health Information

Please tell us which of the following problems you have had in the past month, and how often you have experienced them. For each problem circle 0, 1, or 2 depending on how often each has happened.

		never	a few times	often
1.	poor appetite	0	1	2
2.	stomach upset	0	1	2
3.	headache	0	1	2
4.	trouble sleeping	0	1	2
5.	hands damp and sweaty	0	1	2
6.	hands tremble	0	1	2
7.	cold sweats	0	1	2
8.	dizziness	0	1	2
9.	fainting	0	1	2
10.	nervousness	0	1	2
11.	take medicine other than prescribed	0	1	2
12.	feel weak all over	0	1	2
13.	feel restless, can't sit long in a chair	0	1	2
14.	bothered by a sour stomach	0	1	2
15.	had trouble remembering things	0	1	2
16.	feel hot all over	0	1	2
17.	periods of days when can't get going	0	1	2
18.	sinus trouble	0	1	2
19.	back trouble	0	1	2

Circle the answer to the following questions which applies to you.

During the past month, did you ever experience shortness of breath?
- 0- never (if never, skip the next question)
- 1- sometimes
- 2- often

20. Under what conditions did you usually become short of breath?
    - 1- with heavy exertion
    - 2- with light exertion
    - 3- while resting
    - 4- other: ____________________

During the past month, did you ever notice your heart beating hard?
- 0- never (if never, skip the next question)
- 1- sometimes
- 2- often

21. Under what conditions did you usually notice your heart beating hard?
    - 1- with heavy exertion
    - 2- with light exertion
    - 3- while resting
    - 4- other: ____________________

During the past month, did you ever have chest pains?
- 0- never (if never, skip the next question)
- 1- sometimes
- 2- often

22. Under what conditions did you usually have chest pain?
    - 1- with heavy exertion
    - 2- with light exertion
    - 3- while resting
    - 4- other: ____________________

23. Have you been re-hospitalized for heart attacks since our first interview, about six months ago?
    - 0- no
    - 1- yes How many times?

24. How many times have you been hospitalized with heart attacks in all? ____ times

25. From what your doctor has said and done, what sort of condition would you say your heart must be in? (If not sure, please try to estimate.)
    - 1- poor condition
    - 2- fair condition
    - 3- good condition

26. How often have you been seeing a doctor about your heart since you left the hospital?
    - 0- never
    - 1- once
    - 2- twice
    - 3- three times
    - 4- once a month
    - 5- twice a month
    - 6- three times a month
    - 7- weekly or more

Below is a picture of a ladder. Suppose we say that the top of the ladder represents perfect health, and the bottom represents the most serious illness.

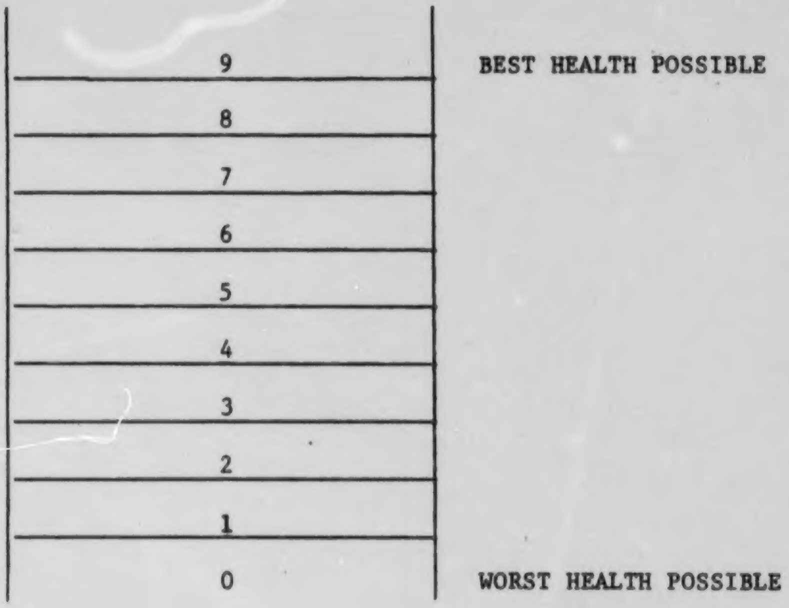
27. On which step would you say your health is right now? _____ (Please write down the number of the step.)

28. On which step would you say your health was just before your heart attack? _____

29. On which step would you say your health was about the time you were discharged from the hospital, about six months ago? _____

30. On which step would you say your health will be 6 months from now? _____

31. On which step would you say the health of the average man your age is? _____ (Please try to answer these even if they are "educated guesses.")



32. Have you begun to have any serious new health problems since you left the hospital?
    0- no
    1- yes What are they? ______________________________

Activities Information

In an average day, how many hours are you now spending in each of the following? Please write down the number of hours spent in each activity.

33. _____ hours a day, sleeping

34. _____ hours a day, working (for pay)

35. _____ hours a day, watching TV, listening to radio and records

36. _____ hours a day, reading newspapers, magazines, and books for pleasure

37. _____ hours a day, just sitting around doing nothing, taking it easy

In an average week, how many hours are you now spending in each of the following? Please write down the number of hours spent in each activity.

38. _____ hours a week, working on hobbies (gardening, building, fishing, walking, etc.)

39. _____ hours a week, attending church and other meetings

40. _____ hours a week, doing volunteer work for church, and other organizations

41. _____ hours a week, visiting and telephoning friends and relatives

When you compare the amount of time you spend now in various activities, with the amount you spent before your attack, tell us if you are now spending more, less, or about the same amount of time on the following activities as before your attack. Circle the choice that applies to you.

	less time now than before the attack	about the same	more time now than before the attack
42. sleeping time	less	same	more
43. working time (for pay)	less	same	more
44. watching TV, listening to radio, records	less	same	more
45. reading newspapers, magazines, books	less	same	more
46. sitting around doing nothing, taking it easy	less	same	more
47. working on hobbies	less	same	more
48. attending church and other meetings	less	same	more

		less time now than before the attack	about the same	more time now than before the attack
49.	doing volunteer work	less	same	more
50.	visiting, telephoning friends and relatives	less	same	more

51. Do you now have a job?
    0- no (if no, answer 'a' below)
    1- yes (if yes, answer 'b' below)

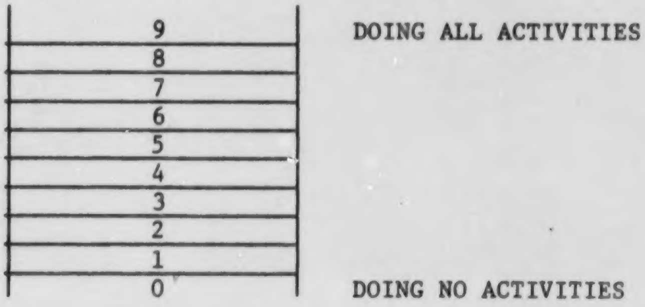
    a) Do you think you will return to work in the future?
        0- no
        1- yes

52. b) Is this the same work you did before your hospitalization?
        0- no If no, what sort of work is it? ____________________
        1- yes

53. When you compare your present income to your income before your heart attack, has your income
    0- dropped a lot?
    1- dropped a little?
    2- stayed about the same?
    3- gone up a little?
    4- gone up a lot?

Below is a picture of a ladder. Suppose we say that the top of the ladder represents doing all of the activities that you enjoy and want to do, and the bottom represents doing none of these activities.

54. On which step would you say your activity level is right now? __________
55. On which step would you say your activity level was just before your attack? __________
56. On which step would you say your activity level was about the time you were discharged from the hospital, about six months ago? __________
57. On which step would you say your activity level will be 6 months from now? __________
58. On which step would you say the activity level of the average man your age is? ______________ (Please try to answer these with 'educated guesses.')



59. About how many times a month do you visit or get visits from relatives?
__________ (Please write the number of times in the blank.)

60. About how many times a week do you talk on the phone with relatives? __________

61. About how many times a month do you visit or get visits from friends and neighbors ? __________

62. About how many times a week do you talk on the phone with friends and neighbors ? __________

63. How many times a month do you attend religious services? __________

64. About how many times a month do you attend meetings of groups such as clubs, unions, and associations? __________

Below is a picture of a ladder. Suppose we say that the top of the ladder represents the most active social life for you, and the bottom represents having no social life at all. The top is when you see all your friends and relatives very often, and the bottom is when you don't see any friends and relatives at all.

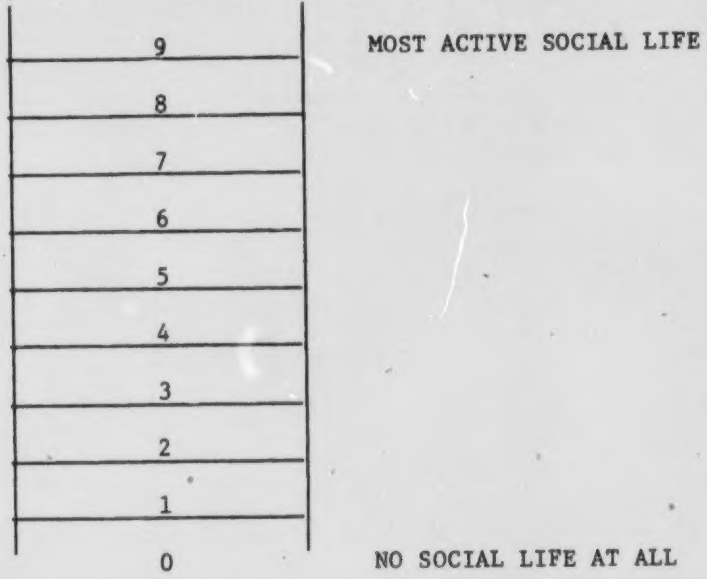
65. On which step would you say your social life is right now? __________

66. On which step would you say your social life was just before your attack? ___

67. On which step would you say your social life was about the time you were discharged from the hospital, about six months ago ? __________

68. On which step would you say your social life will be 6 months from now ? ___

69. On which step would you say the social life of the average man your age is?
__________ (Please try to answer these with 'educated guesses.')



70. Below is a picture of a ladder. Suppose we say that the top of the ladder represents the happiest you can be, and the bottom represents the saddest you can be.

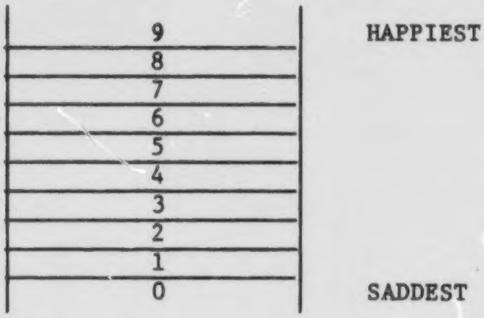
71. On which step would you say your morale is right now? ____________

72. On which step would you say your morale was just before your attack? ______

73. On which step would you say your morale was about the time you were discharged from the hospital, about six months ago? _________

74. On which step would you say your morale will be 6 months from now? ________

75. On which step would you say the morale of the average man your age is? ____ (Please try to answer these with 'educated guesses.')



76. Below is a picture of a ladder. Suppose we say that the top of the ladder represents the most worried you can be about your health, and the bottom represents having no worry about health at all.

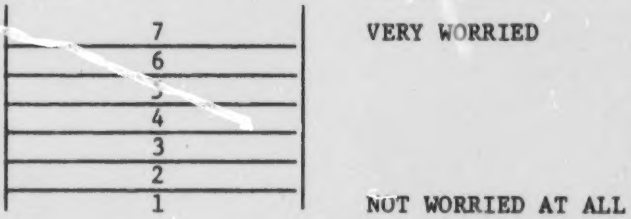
77. How worried are you about your health right now? __________

78. How worried were you about your health just before your attack? _________

79. How worried were you about your health at about the time you were discharged from the hospital, six months ago? __________

80. How worried is the average man your age about his health? ________

81. How worried is your family now about your health? _______ (Please answer these with 'educated guesses.')



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Title: GERIATRIC FUNCTIONAL RATING SCALE TO DETERMINE THE NEED FOR INSTITUTIONAL CARE

Authors: Grauer, H., and Birnbom, F.

Variables: The scale measures an aged person's physical and mental disability balanced against his ability to function, and the support from relatives and community resources. The instrument measures not only the person's ability to care for himself(herself), but assesses such supportive factors as relatives, friends, financial situation, living arrangements, and availability of such resources as recreational facilities and Meals-On-Wheels service.

Description:

Nature and Content: This 30-item observational rating scale is divided into seven groups of items dealing with physical condition, mental condition, functional abilities, support from the community, living quarters, relatives and friends, and financial situation. Items in the first two groups, measuring physical and mental disabilities, have two or three response options and are scored on a negative scale ranging from 0 (no disability) to −20 (severe disability). Not all items are scored equally, since some disabling factors are considered more incapacitating than others. For example, a totally deaf person receives a −5 score; while one with malignant memory loss receives a −20 score. The items of the remaining groups, measuring abilities and supportive environment, are checklist statements scored on a positive scale ranging from 0 to +10, depending on the importance of the ability or supportive function. The highest negative score possible is −118, and the highest positive score is +93. An accompanying information sheet for raters provides guidance for scoring the items.

Administration and Scoring: Volunteer social-work students, as well as nurses and social workers, have administered the scale. The guide offers some objective ways by which the observer can rate the subject, but some observations require more than superficial familiarity with the person being rated and his surroundings.

The value to be assigned each item is indicated on the instrument itself. The positive and negative scores obtained from the rating are calculated to provide an overall score. The overall score can be interpreted to indicate the degree of independence or ability to continue outside an institutional setting according to the following three categories: (1) persons with a score above 40 are able to live in their own home setting; (2) persons with a score between 20 and 40 require some supportive care but not placement in a nursing home; they can probably function in places such as a supervised boarding home, an apartment hotel, or an apartment project for senior citizens. With the aid of a day care program to provide additional support for the aged person and his family, he can continue to live in the community or in a protective setting; (3) persons with a score under 20 require care in a nursing home, a chronic disease hospital, or placement in a psychiatric facility, when the person's psychiatric condition warrants it. These interpretative categories were devised for a validation study of the instrument (Grauer and Birnbom, 1975).

Development:

Rationale: The decision about when and where to place an aged person in an institutional setting is an important one. According to Grauer and Birnbom (1975):

> It is well known that premature admission to an institution often results in severe regression with accompanying depression and loss of physical and mental functioning. Nevertheless, if admission is unrealistically delayed, the patient may have a great deal of difficulty adapting to the institutional setting, which in turn causes morbidity and mortality.

Also, the choice of the setting is often dictated by the resources of the community, but the choice is becoming wider so that the patient's needs and well-being can be considered more fully.

Placement decisions are often made by inexperienced professionals. Even when made by trained professionals, Blenkner's (1969) study showed that institutional placement and morbidity occurred sooner and more frequently in a group receiving "professional social work services" than in a matched group receiving few or no social services.

Emotional bias can be a factor in placement decisions. Thus, it appeared that a rating scale could serve as a practical guide for determining more accurately and objectively the need for placement, as well as aid in the choice of the appropriate institutional setting.

Source of Items: The rating scale was based upon the experience of the authors in the Day Hospital of Maimonides Hospital and Home for the Aged in Montreal.

Procedure for Development: The authors first attempted to rate each patient's degree of physical and emotional well-being. However, because such an assessment can only be made accurately by a medically trained professional, and because other factors play a role in maintaining an aged person in a community, they broadened the scale to include supportive factors and limited the scope of the physical and mental assessment to easily identifiable items which curtail a patient's activities.

Reliability and Validity: No reliability data were provided.

Predictive validity is indicated by a study in which, of 36 patients who obtained a score of 19 or below, 83 percent were in an institution or dead at the time of followup. Sixty-four percent of the 14 deceased patients had scores of 19 or below. The low scores of these debilitated patients tend to support the validity of the rating scale. Of the 77 aged who scored 40 or above, 90 percent were living in the community after an 18-month time lapse.

The validity of the scale appears to be lower when used to assess the need for a protective setting. Of 17 subjects with an initial 20-39 score, 41 percent were living in a "protective setting" on followup.

Use in Research: Grauer and Birnbom (1975) conducted a pilot study to validate the instrument and to establish cut-off points for scoring categories by using the scale with three different groups which totaled 130 persons whose average age was over 70 years. The groups were (1) members of the Golden Age Association in Montreal, (2) patients applying for admission or being treated in the Day Hospital at Maimonides Hospital and Home for the Aged, and (3) patients evaluated for help or possible institutional admission by the Geriatric Service of the Royal Ottawa Hospital in Ottawa. In order to obtain data for validation of the scale and cut-off points, two ratings of the sample were made approximately 18 months apart. Cross-validation of the cut-off points has not been done.

Comments: This measure, although it is relatively brief and still in the exploratory stages of development, is a practical way of quantifying the judgment of whether or not a geriatric patient may need to be placed in a different kind of setting, e.g., a day hospital, an apartment hotel, a nursing home, etc. The scale appears to be easy to use, and the results are readily interpretable for those individuals with extreme scores.

It would be helpful to any potential user to know how the differential weighting factors were arrived at.

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Instrument Copyright: H. Grauer, M.D., and F. Birnbom

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GERIATRIC FUNCTIONAL RATING SCALE TO DETERMINE THE NEED FOR INSTITUTIONAL CARE

NAME____Date of Birth____________

ADDRESS_____________________________________Tel. No.________________

Sex: M F Marital Status: Si M W D S Rel: H P C O

Relative or Friend:

Name____

Address_____________________________________Tel. No.________________

1/ PHYSICAL CONDITION		Score		Score		Score
A) Eyesight	Good Watches TV Reads Needlework	0	Distinguises Faces	-3	Sees Light only	-10
B) Hearing	Good	0	Loud Voice	-3	Deaf	- 5
C) Mobility	Fully Mobile- Dresses Carries Parcels Rides Buss	0	Uses Cane or should use one Dependent on railings	-3	Requires Cane & other support - Wheelchair	-15
D) Pulmo-Cardio-Vascular Function	No Restrictions	0	1 Flight of Stairs 1 City Block	-3	Partly or totally Bedridden	-20
E) Diet	No Restrictions	0			Yes	- 3

2/ MENTAL CONDITION		Score		Score		Score
A) Disorientation	None	0	Time	-3	Person &/or Place	-15
B) Delusions	None	0	Mild - Severe Suspiciousness	-3	Overt	-10
C) Memory Loss	None	0	Benign	-3	Malignant	-20
D) Energy & Drive	Normal	0			Hypoactive or Hyperactive	- 5
E) Judgment	Intact	0			Impaired	- 5
F) Hallucinations	None	0			Auditory &/or Visual	-10

3/	FUNCTIONAL ABILITIES	Score
A)	Reads and writes letters	+ 2
B)	Able to use telephone	+ 5
C)	Able to bank and shop	+ 5
D)	Able to prepare simple meals and bake	+ 7
E)	Washes, dresses and toilets self without assistance	+ 5
F)	Uses public transportation	+ 7
G)	Able or would be able to take own medication and follow diet	+ 10

4/	SUPPORT FROM THE COMMUNITY		Score
A)	Ethnic compatibility		+ 2
B)	If living alone, can get support and help from a reliable relative, friend, neighbour, janitor		+ 10
C)	Able to shop at reliable grocer's (willing to deliver when necessary)		+ 5
D)	Available supportive and recreational facilities -		
		- Clubs geared to aged	+ 2
		- Church, synagogue	+ 1
		- Library	+ 1
		- Park, shopping center, restaurant, movies	+ 1
E)	Geographic availability of	- Public health nurses	+ 2
		- Meals-on-Wheels service	+ 2
		- Homemaker services	+ 2
		- Friendly visitor	+ 2
		- Hospital with emergency and clinic facilities	+ 2
		- Public transportation	+ 2

5/	LIVING QUARTERS	Score
	Elevator service or living on ground floor or basement	+ 3

6/	RELATIVES AND FRIENDS	Score
A)	Not married but lives with compatible and helpful relative or friend	+ 5
B)	Lives with imcompatible relative, friend or spouse	0
C)	Lives with able and compatible spouse	+ 10

7/	FINANCIAL SITUATION	Score
A)	Totally independent	+ 5
B)	Dependent on helpful relative	+ 3
C)	Dependent mainly on Old Age Pension &/or other comm. resources	0

Total Plus Score ________

Total Minus Score ________

Final Score ________

GERIATRIC FUNCTIONAL RATING SCALE

Information Sheet

for Raters

The aim of the scale is to globally evaluate the aged person in a short period of time, in a simple but hopefully significant way, in order to adequately plan for their future care and treatment.

Description of Rating Scale

The forms include the personal data (name, address, nearest relative, etc.) for each person to be rated and 7 groups of items to be scored.

Groups 1 and 2: Physical and mental condition - scored from 0 to 20 for each item. Disability is expressed by a minus score. Circle only one score under each item or subheading.

Groups 3 to 7: Physical and mental condition are balanced against the ability to function, support from the community, relatives and/or friends, living conditions and financial situation, which are all expressed by a plus score.

Group 1 - Physical condition

Item C - Measures mobility. Impairment is usually due to osteo-arthritis or muscular weakness or spasm secondary to a stroke.

Item D - If cardiac and/or pulmonary function prevents a person from climbing more than one flight of stairs or from walking more than one city block - Score -3.

If severely impaired, i. e., almost bed-ridden, Score -20.

If bedridden, try to determine if this is due to lack of mobility or impaired pulmo-cardiovascular function. Do not score both -15 and -20.

Group 2 - Mental Condition

Item A - If a person is disoriented to one or more of the following, i. e., time of day, day of week or month, or year - Score -3.

If a person is disoriented as to place (where he is) and/or self (who he is) - Score -15.

Item B - Delusions. Try to ascertain

(a) whether he feels (unrealistically) that some people or institutions are against him;

(b) whether neighbours are (unrealistically) particularly nasty and/or if he thinks they are taking things from him;

(c) whether he has unwarranted influence over others or is influenced in an unrealistic way by others.

If the answer to one or more of these questions is 'yes', circle -10.

If there is an indication of severe suspiciousness, but person will not admit overt delusions, score -3. If you cannot detect any delusions, circle 0.

Item C - Memory Loss - Ask for

(1) Year and place of birth.
(2) Year of marriage.
(3) Year of arrival in Canada, if applicable.
(4) Name of school attended.
(5) Previous address.

If a person cannot answer 3 of these questions, but remembers place of birth and age, circle -3.

If a person cannot answer any of the above questions, ask for the name of his doctor, social worker or volunteer in the club, age and names of his children and present address. If he is unable to answer these questions or answers very poorly, circle -20.

If he does well on all questions under Item C, score 0.

Item D - Energy and Drive.

If a person is sad, apathetic and retarded in his actions, he is hypoactive and probably depressed. If he is restless, agitated and overtalkative, possibly manic. In both cases, score -5.

Item E - Judgment.

Measures 'common sense'-the ability to make the right decisions, to dress appropriately, seek help when needed, to budget properly, etc. If judgment seems intact, score 0, if markedly impaired, score -5.

Item F - Hallucinations.

Most common are auditory. The person will hear a voice or voices when nobody is talking to him. Senile persons living alone may 'hear' neighbours complaining about them, accusing or vilifying them; a widow may 'hear' her deceased husband talk to her. Visual hallucinations are very rare. Score -10 if hallucinations are present.

Group 4 - Support from Community

Item A - Ethnic compatibility - means that the person is living in a milieu where he is able to communicate with and relate to his neighbours. For example: A Jewish person living in a Greek section of Montreal would find little or no ethnic compatibility.

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Title: PATIENT PAST PAIN EXPERIENCE INTERVIEW

Authors: Jacox, Ada, and Stewart, Mary

Variables: The instrument was designed to assess the pain of a current illness and how that pain might be related to a patient's past experiences with pain, especially pain in childhood.

Description:

Nature and Content: The 14-item interview schedule consists of three sections and was developed for use with hospitalized patients experiencing varying degrees of pain. The first section provides space for recording patient identification information.

The second section includes eight multi-part, open-ended questions related to the patient's pain history for the current illness, e.g., when and what kind of professional assistance was sought for treatment of the pain, what explanations were offered to the patient regarding the pain, what contact did the patient have with friends and relatives who had experienced similar pain, etc.? For instance, one item asks, "When did you first see a doctor about the pain and/or other symptoms? (a) What made you decide to see a doctor? (b) How did you decide what doctor to see?"

The third section of the instrument includes six multi-part, open-ended questions some of which relate to a painful experience recalled from childhood. A typical item is "Do you usually like to talk with others about your pain? Whom do you talk with? What is their reaction?"

Administration and Scoring: The interview can be conducted by anyone capable of establishing the necessary rapport with the patient (interviewers in an initial study were experienced nurses). It takes less than an hour to complete.

Each patient interview is tape recorded, and response categories are established on the basis of the content of the responses and the needs of the individual investigator.

Development:

Rationale: Pain cannot be viewed as a physiological phenomenon; it must be conceptualized within a biopsychological framework. It has been frequently noted in the literature that a person's interpretation and response to pain are influenced by his past experience with pain. The instrument under consideration was devised to collect historical data bearing the psychosocial contingencies of the pain experience.

Source of Items: The interview schedule was based on one originally used by Zborowski (1969), cited in Jacox and Stewart (1973).

Procedure for Development: The instrument was modified extensively by the authors on the basis of several pilot studies.

Reliability and Validity: In an initial study (Jacox and Stewart, 1973) of 102 hospitalized patients experiencing varying degrees of pain (short-term associated with elective surgery, long-term pain associated with chronic illness such as arthritis, and progressive pain associated with terminal illness such as metastatic cancer), two raters independently scored a sample of 12 interviews and attained approximately 60 percent interrater agreement. The response categories were then revised, and the two raters independently scored 102 interviews. This trial resulted in 85 percent interrater agreement.

Use in Research: In a study of 102 patients undergoing treatment at a large midwestern university medical center (Jacox and Stewart, 1973), subjects were classified by the type of pain they were experiencing: short-term, long-term, or progressive. The entire questionnaire was administered to each of the three groups; however, the results for the second section only were reported.

Comments: The open-ended interview technique used with this instrument produces data rich in detail and interest, but which may be difficult to categorize and code. The individual investigator must develop a coding scheme and assess interviewer and interrater reliability himself(herself). The categorization scheme devised by the authors for the second section of the instrument is available in their report and should be consulted.

References:

Jacox, Ada, and Stewart, Mary. *Psychosocial contingencies of the pain experience* (DHEW Grant No. NU–00387–02). Iowa City: University of Iowa, 1973.

Source of Information:

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PATIENT PAST PAIN EXPERIENCE INTERVIEW

A. Pain History and Alleviation: Current Illness

Ward ____________
Location or ward where interviewed ____________
Date ____________
Interviewer ____________

Study No. ____________
Pain Category S L P
Patient's Name ____________
File Number ____________

Are you in pain now? If so, can you describe how it feels?

1. Did you have pain before coming to the hospital? ________
   a. If so, was it the main reason for coming to the hospital? ________

2. Did you have pain initially that was related to your present condition? ____________

   What other symptoms did you have?

3. If pain was present:
   a. When did you first feel the pain?
   b. Please describe how it felt.
   c. Had you ever felt pain like that before?
   d. What did you think caused the pain?
   e. What did you do about the pain?

4. Did you discuss the pain and/or symptoms with relatives, friends or anyone else before you decided to see a doctor?

   If so, what did (he, she, they) think you should do about it?

5. When did you first see a doctor about the pain and/or other symptoms?
   a. What made you decide to see a doctor?
   b. How did you decide what doctor to see?

6. Did you receive an explanation from the doctor as to what was causing the pain and/or other symptoms? ____________
   a. If so, what was the explanation?

7. Have you had much pain since you were admitted to the hospital? ________

8. Have any of your close relatives or friends had pain or illness similar to that which you have now?

   If so, what was your contact with them at that time?

B. Childhood Experiences Related to Pain

1. Can you describe a painful experience (either illness or accident) that occurred in your childhood?
    a. How old were you?
    b. What was your reaction? (Probe: cry, frightened, ashamed, angry, etc.)
    c. Did you go to your parents (or other person caring for you)?
    d. What was their (his, her) reaction?
    e. What did they (he, she) do?

2. Did you have many painful experiences in your childhood? (elicit brief description including patient's and parents' reactions.)

3. Did your parents (or others) ever tell you that a painful experience was sometimes a form of punishment?

4. How were you usually punished?

5. How do you usually react to pain? (Probe: cry, try to hide it, become angry, etc.)

6. Do you usually like to talk with others about your pain?
    a. Who do you talk with? (mother, husband, nurse, doctor)
    b. What is their reaction?

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Title: PRENATAL QUESTIONNAIRE

Author: Lowe, Marie L.

Variables: The instrument was designed to measure patients' attitudes toward and behavioral compliance with a regimen prescribed during prenatal care. Compliance was defined as "change in reported behavior in the recommended direction over the course of pregnancy" (Lowe, 1970).

Description:

Nature and Content: The Prenatal Questionnaire is, for the most part, an interview schedule with a short, self-administered section on patient attitudes and a section for data from the patient's health care record. Response categories vary with the type of question.

The 83 items of the questionnaire are distributed as follows:

Part (A): Seventeen items of demographic data and information pertaining to the pregnancy.

Parts (B, C, and D): Thirty-eight behavioral items which assess "compliance with prenatal medical advice."

Part (E): Fifteen self-rated items which assess the patient's perceptions of specific health care practices related to pregnancy.

Parts (F and G): Thirteen items regarding the outcome of delivery and public health nursing followup. This includes information from the nurse's record covering the number of visits from the public health nurse during pregnancy, the instructions given by the public health nurse to the patient, and background information on the nurse herself(himself).

Administration and Scoring: The questionnaire was designed to be administered both at the outset of prenatal care and near the end of pregnancy. Thus, many of the questions have two slightly different forms. For the first administration, the interviewer begins the questions with the words, "Since the time you first thought you were pregnant . . . ." For a subsequent administration, the interviewer substitutes, "Since you have been coming to the clinic . . . ."

The interview requires approximately 20 minutes. However, additional time must be allotted for obtaining information from clinical records and for allowing the patient to complete the 15 attitudinal items.

Scoring consists of calculating mean behavior and frequencies for individual items. Responses on the attitude scale part are converted to scores of 1 (very good) to 7 (very bad) or vice versa, depending upon which direction is prescribed. High scores indicate favorable attitudes toward the prenatal regimen.

Development:

Rationale: The need to assess patient compliance with medical recommendations for prenatal care has become increasingly important as efforts to serve a greater number of pregnant women have intensified. The literature on obstetrics indicates a lack of agreement as to the effectiveness of prenatal care. Those who argue that prenatal care is ineffective suggest that this may be due in part to poor communication between patient and physician. The Prenatal Questionnaire was developed as one criterion by which to assess the effectiveness of physician-patient communication.

Source of Items: Items were intended to cover traditional areas of prenatal care instructions, including diet, rest, exercise, use of medications, and clinic and class attendance.

Procedure for Development: No details were provided.

Reliability and Validity: No reliability information was provided.

The content validity of the instrument was judged by a senior obstetrics resident and the head nurse of an obstetrics clinic. They compared the questions with instructions given to all patients who attended the obstetrics clinic and concluded that the schedule was complete and relevant to actual practice.

Use in Research: Lowe (1970) conducted a study of the effectiveness of teaching by public health nurses as measured by compliance with medical recommendations. Fifty-six primigravidas were randomly assigned to experimental and control groups. The control group received clinic care and instructions, while the experimental group was referred to the local public health nursing service for instructions in addition to their clinic care.

Comments: The instrument's content is specialized, but parts of it could be modified for use with other patient populations. Its chief advantage lies in its comprehensiveness and in the author's attempt to assess attitudinal as well as behavioral compliance. However, the portion designed as an attitude test with "no right or wrong answers" could be considered a knowledge test for which there are right and wrong answers. Also, instead of "compliance" in certain areas of prenatal advice, the variables being measured may also be conceptualized as "nutrition behavior," "activity-rest," "medication-taking behavior," etc. The behavior becomes "compliance" when related to professional advice.

References:

Lowe, Marie L. Effectiveness of teaching as measured by compliance with medical recommendations. *Nursing Research*, 1970, *19* (1), 59–63.

———. Relationship between compliance with medical regimen and outcome of pregnancy. *Nursing Research*, 1973, *22* (2), 157–160.

Source of Information:

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Instrument Copyright:

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10 Columbus Circle
New York, N.Y. 10019

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PRENATAL QUESTIONNAIRE

Study Number__________

Date______________

Interview: 1____ 2____

Name________________________________ Clinic Number__________

Address______________________________ Tel. Number__________

A. 1. Place of Residence: (1) Urban___ (2) Rural Non-farm___ (3) Rural Farm___

If Farm: (4) Own___ (5) Rent___ (6) Tenant___ (7) Sharecropper___

If Own Farm: Number of Acres______ If Tenant: Machinery Owned__________

2. Date of Birth______________ Age at last birthday______________

3. (1) Married___ (2) Single___ (3) Widow___ (4) Divorced___ (5) Separated___

4. Highest Grade Completed in School______________________________

5. Occupation______________________________

6. When you were a child, who was the head of your family?______________

7. What kind of work did he (she) do?______________
Factor Weight 7 x (1) (2) (3) (4) (5) (6) (7) = Score______________

8. What was the highest grade he (she) completed in school?______________
Factor Weight 4 x (1) (2) (3) (4) (5) (6) (7) = Score______________

9. Who is the head of your family now?______________

10. What kind of work does he (she) do?______________
Factor Weight 7 x (1) (2) (3) (4) (5) (6) (7) = Score______________

11. What is the highest grade he (she) completed in school?______________
Factor Weight 4 x (1) (2) (3) (4) (5) (6) (7) = Score______________

(Social Class Score: Family of Origin__________ Current Family__________)
(7. + 8.) (10. + 11)

B. 18. If more than three glasses a day, specify amount ____________________

19. Please name for me the vegetables which you usually eat since the time you first thought you were pregnant (since you have been coming to clinic). Probe

____________ ____________ ____________

____________ ____________ ____________

____________ ____________ ____________

20. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat one or more servings of any of the green vegetables you have named? (Refer to list in 19 and remind her of specific vegetables.) On the days you eat these vegetables, how many servings do you usually eat?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									

21. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat one of the other vegetables you have named? (refer to list in 19.) On the days you eat these vegetables, how many servings do you usually eat?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									

12. Is this the first time you have ever been pregnant? Yes___No___Don't know___

13. Date of Onset LMP ______________________ Week of Pregnancy ______________

14. Weight ______________

15. Height ______________

16. Hemoglobin ______________ ______________ ______________
(From Clinic Record. Date Each Entry)

17. Since the time when you first thought you were pregnant, have you felt sick or has anything happened that made you change the things you usually eat, or made you change other things you usually do? Probe. (0) No ___ (1) Yes ___

____

____

Initial Interview: Now I would like to ask you some questions about the foods you usually eat. Just think about the foods you usually eat in the period since you first thought you were pregnant.

Final Interview: Now I would like to ask you some questions about the foods you usually eat. Just think about the foods you usually eat in the period since you first started to come to clinic.

B. 18. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually drink milk? On the days that you drink milk, how many glasses do you usually drink? (If necessary, probe for buttermilk, sweet milk, carnation, pet, etc.)

Glasses Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

22. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat an egg? On the days you eat eggs, how many do you usually have?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									

23. Since the time you first thought you were pregnant (since you have been coming to clinic) how do you usually cook your eggs? If fry, what do you put in your frying pan to cook them in? (0) Fry in Fat____ (1) Other____

24. Since the time when you first thought you were pregnant (since you have been coming to clinic) what kinds of fruit have you usually been eating?

25. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat one of these fruits? On the days you eat fruit, how many times a day do you eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									

26. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat bacon or salt pork? On the days you eat bacon or salt pork, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

27. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat prepared meats like hot dogs or baloney? On the days you eat this kind of meat, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

26. Since the time you first thought you were pregnant (since you have been coming to clinic) what other kinds of meat do you usually eat? (Probe for beef, veal, chicken, fish, etc.)

29. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat one of the meats you have just told me about? On the days you eat one of these meats, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									

30. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat liver? (Circle one)

Days Per Week								
0	1	2	3	4	5	6	7	

31. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually fry your meat in fat? On the days you eat fried meat, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

32. Since the time you first thought you were pregnant (since you have been coming to clinic) what do you usually use to season your vegetables?

(0) Fat Back or Other Pork_____ (1) No Fat_____

33. Since the time you first thought you were pregnant (since you have been coming to clinic) how much salt do you usually eat on your food?

(0) A Lot_____ (1) Right much___ (2) A little___ (3) Hardly any___

34. Since the time you first thought you were pregnant (since you have been coming to clinic) what kinds of breakfast cereals do you usually eat? Probe for both dry and cooked.

35. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat one of these cereals? On the days when you eat one of them, how many times a day do you usually eat cereal?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
1+									

36. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat biscuits or some other kind of bread? On the days you eat biscuits or bread, how many do you usually eat?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									
3+									

37. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat gravy? On the days you eat gravy, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

38. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually drink Coke, Pepsi, or any other bottled drinks? On the days you drink them, how many do you usually drink a day?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									
3+									

39. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat candy or desserts? (Probe for cake, pie, jelly, ice cream) On the days you eat candy or desserts, how many times a day do you usually eat them?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
1+									

40. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat starchy foods? Probe for macaroni, spaghetti, noodles, grits, and rice. On the days you eat one of these foods, how many times a day do you usually eat it?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

41. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually eat dried peas or beans? On the days you eat dried peas or beans, how many times a day do you usually eat them?

Servings Per Day	Days Per Week								
	0	1	2	3	4	5	6	7	
0									
1									
2									
3									

42. Since the time you first thought you were pregnant (since you have been coming to clinic) what do you usually use to season your dried peas or beans?

(0) Fat Back or Other Pork_____ (1) No Fat_____

Who in your family buys the food and plans meals?____________________

C. 43. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you think you walk as much as a mile?

Days Per Week								
0	1	2	3	4	5	6	7	

44. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you do some housecleaning or laundry either for yourself or someone else?

Days Per Week								
0	1	2	3	4	5	6	7	

45. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you work outdoors some in the yard or garden?

Days Per Week								
0	1	2	3	4	5	6	7	

46. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually lie down to rest during the day?

Days Per Week								
0	1	2	3	4	5	6	7	

47. Since the time you first thought you were pregnant (since you have been coming to clinic) what time do you usually go to bed at night?_____________

get up in the morning?___________ Usual Number hours sleep_______________

(0) Less than 8 hours_____ (1) 8 hours or more_____

D. 48. Since the time you first thought you were pregnant (since you have been coming to clinic) what medicines have you been taking? How much? How often? Why?

Drug	Amount	Frequency	Reason

(0) Take unprescribed drug_____ (1) Do not take unprescribed drug____

49. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually take a laxative? What is the name of the laxative you usually take?

(0) Take laxative___

(1) Do not take laxative____

Days Per Week								
0	1	2	3	4	5	6	7	

50. Since the time you first thought you were pregnant (since you have been coming to clinic) how many days a week do you usually take a douche?

(0) Take Douche____

(1) Do not Take Douche_____

Days Per Week								
0	1	2	3	4	5	6	7	

51. (FINAL ONLY) In the past three months how many days a week have you usually been taking a tub bath?

(0) Take Tub Bath___

(1) Do not take Tub Bath____

Days Per Week								
0	1	2	3	4	5	6	7	

52. Since the time you first thought you were pregnant (since you have been coming to clinic) how many cigarettes do you usually smoke a day?

(0) More than a pack____ (1) One pack____ (2) Less than a pack____ None____

53. Since you have been coming to clinic how many Mothers' Classes did you go to?

Classes				
0	1	2	3	4

54. Number of Clinic visits (from record)________________________

55. Were the clinic visits spaced as recommended? Yes(1)____ No(0)____

INDIVIDUALIZED QUESTIONS FOR FINAL INTERVIEW BASED ON NON-ROUTINE ADVICE

It will help us to know how you feel about certain things which might have some importance in pregnancy. There are no right or wrong answers to the questions which follow. Please put an x along the line in the position that shows best how you feel about the phrase in relation to pregnancy. Here is an example to show you what I mean.

Swelling of Hands and Feet in Pregnancy:

Very Bad	Bad	Neither Good Nor Bad	Good	Very Good

x

I put my mark close to the bad end of the line because that is how I feel about swelling of hands and feet in pregnancy. Now you mark the following lines to show how you feel about these things in relation to pregnancy.

E. 56. EATING FRIED FOODS:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

57. A REST PERIOD EVERY DAY:

Very Bad	Bad	Neither Good Nor Bad	Good	Very Good

58. CIGARETTE SMOKING:

Very Bad	Bad	Neither Good Nor Bad	Good	Very Good

59. EATING SALAD GREENS EVERY DAY:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

60. WORKING DURING PREGNANCY:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

61. EATING ORANGES EVERY DAY:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

62. COMING TO CLINIC AT LEAST EVERY MONTH:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

63. GAINING 18 POUNDS DURING PREGNANCY:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

64. SLEEPING EIGHT HOURS EVERY NIGHT:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

65. EATING SALT PORK OR FAT BACK DURING PREGNANCY:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

66. TAKING LAXATIVES REGULARLY DURING PREGNANCY:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

67. EATING BEEF, CHICKEN, OR DRIED BEANS EVERY DAY:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

68. TAKING A DOUCHE EVERY DAY WHILE PREGNANT:

Very Good	Good	Neither Good Nor Bad	Bad	Very Bad

69. DRINKING SWEET MILK DAILY WHILE PREGNANT:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

70. EATING AN EGG EVERY DAY WHILE PREGNANT:

Very Bad	Bad	Neither Bad Nor Good	Good	Very Good

F. 71. Date of Delivery ______________________

72. Type of Delivery (specify) ______________________

73. Condition of Baby: Live ___ Dead ___ Normal ___ Abnormalities (specify) ______________________

74. Sex of Baby: Male ___ Female ___

75. Birth weight ______________________

G. 76. Number of visits from Public Health Nurse during pregnancy __________ (From Nurse's Record)

77. Name of Nurse ______________________

78. Age of Nurse (last birthday) ______________________

79. Graduate of ______________________ School of Nursing

80. Year of graduation ______________________

81. Preparation for Public Health Nursing ______________________

82. Length of time employed in Public Health ______________________

83. Instructions given by nurse to patient as reported in the nursing record

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Title: SCREENING QUESTIONNAIRE FOR HEALTH NEEDS OF OLDER ADULTS, STAGE II

Authors: Managan, Dorothy, Wood, Jean, Heinichen, Chlao, Hoffman, Marian, Hess, Gertrude, and Gillings, Dennis

Variables: This instrument provides information on seven variables: physical functioning, health condition, accessibility of medical care, social isolation, service needs, contentment, and subjective health index.

Physical functioning is the respondent's reported ability to perform activities of daily living and the availability of help if needed. Activities were going up and down stairs, getting out of the house, getting about inside the house, washing and bathing, dressing and putting on shoes, feeding self.

Health condition is the respondent's reported illness during last month, confinement status, presence of specific medical problems and symptoms, time since last saw a physician, and habits regarding routine medical and dental examinations.

Accessibility of health care is the respondent's responses to questions as to why he(she) had not reported a symptom to a physician and why he(she) did not have routine physical and dental checkups.

Social isolation is the respondent's interaction with others either by telephone contacts, social visits, or participation in formal group activities, perceptions regarding neighbors, feelings of loneliness, and desire for additional contacts.

Service needs is the respondent's ability to obtain meals, transportation, and household help for laundry, shopping, and housework.

Contentment is the respondent's reported satisfaction with living arrangements, way of life, degree of health, anxiety, and general happiness.

Subjective health index is the respondent's impression of his(her) health status.

Description:

Nature and Content: This questionnaire is made up of 8 demographic items and 69 questions designed to provide information regarding the 7 variables described above. Responses to all questions are coded on response scales that have a range of from two to eight response alternatives.

Administration and Scoring: This instrument is administered by a trained interviewer and requires approximately 45 minutes to administer. It is designed to be answered in a respondent's home within 2 to 4 weeks after the initial Screening Questionnaire (Managan et al., 1974) is completed. It is assumed that the interviewer will arrange an appointment time for administering the questionnaire.

Scores are computed for each of the variables and/or subgroups within each variable by summing the coded responses to the questions assigned to each variable. Responses to 4a, 5a, 6a, 7a, 8a, and 9a are combined to provide the score for *physical functioning*. Responses to items 10, 11, 12, 12a, 13 through 33, 45, 47, 60, and 62 through 64 are combined to provide the score for *health condition*. Responses to items 13a through 29a, 34, 37, and 37a provide the score for *accessibility of health care*. *Social isolation* is determined by combining the responses to items 48 through 57. *Service needs* score is computed by combining responses to items 39, 40, 40a, 41, 41a, 42, 42a, 43, and 43a. *Contentment* is the sum of responses to items 30, 45, 47, 60, 62, 63, and 64. *Subjective health index* is the sum of the responses to items 31, 32, and 33. The total score for each variable or subgroup within each variable for the variable or subgroup is then divided by the maximum possible score in order to obtain a score range of 0-6. Meaningful problems are assumed to be those at or above the acceptance levels. The acceptance level is based upon the professional judgment of the staff and administrative nursing personnel of the agency conducting the research.

Development:

Rationale: This instrument was developed in order to provide information regarding the extent to which persons who report health problems require help from a secondary support system.

Source of Items: Some of the items were adapted from *Social indicators for the aged*. U.S. Department of Health, Education, and Welfare (1971), and *Community care for the elderly: An alternative to institutionalization* (Bell, 1971). Additional items were developed by the authors.

Procedure for Development: This instrument was based upon the Screening Questionnaire for Health Needs of Older Adults, Stage I. Based upon the experience with that questionnaire, the instrument was revised and pretested with a small sample of older adults (n = 10 to 15); additional changes were made in the instrument (Managan et al., 1976).

Reliability and Validity: No information was provided regarding either the test-retest or the split-half reliability characteristics of the measures of the instrument.

A positive relationship ($p < 0.01$) was observed between the Subjective Health Index and the combined Physical Functioning Ability Scores (Managan et al., 1976). The authors noted that this result agreed with similar information observed by Shanas et al. (1968).

Use in Research: This instrument and adaptations of it have been widely used in community health care research.

Comments: The instrument provides information in the areas it was designed to measure. The high degree of agreement between respondents' scores and judgments made by public health nurses on an earlier version suggests that data from a test-retest study would, in all likelihood, indicate a high degree of stability in the scores. Moreover, the clarity and specificity of the questions would make it likely that a high degree of stability would be obtained from such a study.

It would be useful to have information on the between-item characteristics of the items used in this test. The scores are derived by combining items with differing numbers of responses to questions. This means that certain items may be given more emphasis than they might actually empirically require.

Because of its length, the instrument itself is not reproduced in this compilation.

References:

Bell, W. G. *Community care for the elderly: An alternative to institutionalization.* State of Florida, Department of Rehabilitation Services, 1971.

Institute for Interdisciplinary Studies. *Social indicators for the aged.* Administration on Aging, U.S. Department of Health, Education, and Welfare, 1971.

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Shanas, Ethel, et al. *Old people in three industrial societies.* New York: Atherton Press, 1968.

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Instrument Copyright: None.

Title: PSYCHOSOCIAL PROBLEMS OF ADOLESCENTS WITH EPILEPSY (4 instruments)

Authors: Richardson, Donald W., and Friedman, Stanford B.

Variables: The variables to be identified are the psychosocial problems of the adolescent patient with epilepsy as perceived by the patient and his(her) parents.

Description:

Nature and Content: There are a total of four instruments designed to be used concurrently: Adolescent Questionnaire, Parent Questionnaire, Adolescent Interview, Parent Interview. The Adolescent Questionnaire contains 20 questions plus a space for "Other Comments"; the questions concern school, career plans, health problems, health-related problems, and sources/avenues of help. The Parent Questionnaire (18 items and space for "Other Comments") addresses such areas as the patient's seizure history, school problems, social problems, health problems, and sources of help available to the family.

The Adolescent Interview schedule contains 19 open-ended questions designed to elicit information regarding problems associated with the diagnosis at home, at school, in other social relationships.

The Parent Interview schedule contains 12 open-ended questions designed to elicit information about the effects of the diagnosis on the adolescent from the parents' perception.

Administration and Scoring: Interviews are scheduled before the questionnaires are completed. Each teenager and accompanying parent(s) are interviewed separately for approximately 30 to 45 minutes. Each interview is guided by the set of interview questions described above, although each response is to be followed-up in as much depth as possible. During the interview, notes should be taken on the subject's responses to each question. Immediately after the interview, these responses should be dictated in order to preserve the data. The responses may be summarized and categories of responses identified. Categorization will depend upon the purposes of the investigators. Following completion of the interviews, each teenager and each parent is given the appropriate questionnaire to complete.

Development:

Rationale: Livingston (1970) has stated: "The most serious hazard of an epileptic disorder is frequently not the seizure per se but the associated emotional disturbances which are prone to develop in a youngster as a result of mismanagement by his family, by his classmates and friends."

Academic underachievement is described by Green and Hartlage (1971) in their series on epileptic children and adolescents. They found that grade placement was significantly lower than would be expected from psychological tests, and suggest that teachers and parents have low expectancy for epileptic children.

The adolescent patient suffering from a seizure disorder according to the authors may be burdened with a complicated mixture of medical and psychosocial problems. The medical information is easier to elicit; the psychosocial information, more closely guarded by the patient, takes time and skill to uncover. This group of instruments is designed to aid in identifying some of the problems facing both the patient and the parents with the intent of providing help, particularly through clinic facilities.

Source of Items: No information was provided.

Procedure for Development: No information was provided.

Reliability and Validity: No reliability or validity information was provided.

Use in Research: Findings of the research study conducted by Donald W. Richardson, M.D., and Stanford B. Friedman, M.D., are presented in an article in *Clinical Pediatrics*, February 1974 entitled "Psychosocial Problems of the Adolescent Patient with Epilepsy." Their study included 17 families of epileptic patients.

Parents were asked to compare the adolescent with his closest sibling in terms of problems in four areas: school, health, friends, and family. Eight parents reported no differences between the patient and his nearest sibling in overall problems, nine reported the patients had more problems, and none reported the sibling had more.

Comments: These four measures—two questionnaires and two structured interview procedures—are general descriptive, data-gathering instruments which can be used to help identify problems of epileptic adolescents. Some items evoke factual information, and some are designed to elicit feelings and perceptions of problems of epileptic adolescents. Any potential researcher should be cognizant of the fact that in their present stage of development, the in-

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struments contain a large number of open-ended items, and categorization and analysis of data obtained by this method may pose some major measurement problems.

References:

Green, J. B., and Hartlage, L. C. Comparative performance of epileptic and nonepileptic children and adolescents. *Diseases of the Nervous System.* 1971, *32*, 418.

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Pond, B. A., and Bidwell, B. H. A survey of epilepsy in fourteen general practices. *Epilepsia*, 1960, *1*, 285.

Richardson, Donald W., and Friedman, Stanford B. Psychosocial problems of the adolescent patient with epilepsy. *Clinical Pediatrics*, 1974, *13* (2), 121–126.

Rutter, M., Graham, P., and Yorke, W. A neuropsychiatric study in childhood: Clinics in developmental medicine. *Spastics International Medical Publications*, (Volume 35 and 36). London and Philadelphia, 1970.

Source of Information:
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Instrument Copyright: None.

Richardson, Donald W., and Friedman, Stanford B.

PSYCHOSOCIAL PROBLEMS OF ADOLESCENTS WITH EPILEPSY - ADOLESCENT QUESTIONNAIRE

NAME: ______________________________

AGE: ______________________________

DATE: ______________________________

1. What school do you now attend?

2. What grade of school are you now in?

3. a) Have you ever been held back a year in school?
   b) Which grade(s)?

4. What was your average mark on your report card from last semester?

5. What was your highest mark on your report card from last semester?

6. What would you say is the biggest problem for you in school?

7. What would you like to do when you leave high school?

8. What kind of work would you eventually like to do?

9. a) Do you feel your seizure problem will influence in any way the kind of work you will eventually do?
   b) How?

10. What are your major health problems?

11. a) Do you feel your seizure problem has affected your health in any way?
    b) How?

12. What would you say are the major difficulties your seizure problem has caused for you?

13. a) What medications are you now taking? (Please check)

    Phenobarbitol

    Dilantin

    Mebaral

    Mysoline

    Other (Please list)

14. a) Do you feel there are any risks in taking these medications?
    b) What risks?

15. Do you feel the doctors in clinic should tell you more about your seizure problem?

16. What additional information would you like to have?

17. How could the doctors and staff in the Clinic be of more help to you?

18. What changes would you like to recommend in the Clinic?

19. Would you be interested in a group meeting with other teenagers from the Clinic?

20. What subjects would you like to discuss in such a session?

21. Other comments:

Richardson, Donald W., and Friedman, Stanford B.

PSYCHOSOCIAL PROBLEMS OF ADOLESCENTS WITH EPILEPSY-PARENT QUESTIONNAIRE

NAME: ______________________________

DATE: ______________________________

Please Indicate:

Mother _____

Father _____

1. a) When did your (son) (daughter) have his first seizure?

   Within last month ( )

   Within last year ( )

   Within five years ( )

   Within ten years ( )

   More than ten years ( )

   b) When did he have his last seizure?

   Within last week ( )

   Within last month ( )

   Within last year ( )

   Within last five years ( )

   Within last ten years ( )

   More than ten years ago ( )

2. How frequently does he have a seizure?

   Once a day or more ( )

   Once a week or more ( )

   Once a month or more ( )

   Once a year or more ( )

   Other (Describe) ( )

3. Does he lose consciousness when he has a seizure?

4. What else happens when he has a seizure?

5. What medications is he now taking?

   Phenobarbital

   Dilantin

   Mysoline

   Mebaral

   Other (List)

6. What risks or problems do you feel there might be in taking regular medication like this?

7. What problems have your son (or daughter) had in school?

8. a) Have you had any meetings with any of the staff at school around his seizure problem?
   b) What was the main purpose of such a meeting?

9. In what ways have you as parents restricted him because of his seizure problem?

10. Who recommended these restrictions?

11. For his routine medical care, whom do you visit?

    Family doctor ( )

    Paediatrician ( )

    Hospital clinic ( )

    Other (Describe) ( )

12. In what way does his seizure problem affect the family?

13. a) Do you feel his seizure problem affects the way other people in your neighborhood react towards him or the family?
    b) In what way?

14. a) Do you feel his seizure problem has affected his health?
    b) In what way?

15. Please rank the following (1,2,3,etc.) in the order that you feel they have been the most help to you in dealing with your son's (daughter's) seizure problem (#1 indicates the most help):

( ) Family doctor

( ) Neurology clinic

( ) General hospital clinic

( ) Neighbors

( ) Parents of other children with a similar problem

( ) Clergyman

( ) School

( ) Other agency or group (Please list)

16. What further information would you like the doctors in clinic to give you?

17. In what ways do you feel the doctors or clinic staff could be of more help to you or your son or daughter?

18. What changes in the clinic would you recommend?

19. Other comments:

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Richardson, Donald W., and Friedman, Stanford B.

PSYCHOSOCIAL PROBLEMS OF ADOLESCENTS WITH EPILEPSY-ADOLESCENT INTERVIEW

1. Do teachers at school know you have a seizure problem?
2. What adults in the school setting have you discussed your seizure problem with?
3. In what ways do you feel you receive special consideration at school because of your seizure problem?
4. In what ways are you restricted at school because of your seizure problem?
5. What difficulties has your seizure problem caused for you in the school setting?
6. What difficulties do you have at home because of your seizure problem?
7. What difficulties do you have with brothers or sisters because of your seizure problem?
8. What problems do you have with your parents because of your seizure problem?
9. What are the problems you have at home with taking your medication?
10. Who is responsible for seeing you take your medication?
11. What things do your parents keep you from doing because of your seizure problem?
12. How is your seizure problem a difficulty in your relationship with your friends?
13. What kinds of problems would you see a person who has had seizures in the past having in his relationship with someone of the opposite sex?
14. Do you feel your seizures have affected your health in any way?

15. What do you feel causes your seizures?

16. When has your seizure problem caused you the most difficulty?

17. From where have you received most of your information about your seizure problem?

18. Has reading been a way of learning about your seizure problem?

19. What kind of reading material do you feel the clinic should have available for young people with a seizure problem?

Richardson, Donald W., and Friedman, Stanford B.

PSYCHOSOCIAL PROBLEMS OF ADOLESCENTS WITH EPILEPSY-PARENT INTERVIEW

1. What problems do you feel his seizures have caused for him?

2. What difficulties has he had at school because of his seizures?

3. Has the school had any special contact with you because of his seizures?

4. Do you feel his seizure problem has slowed his progress in school in any way? ______________________
   How?

5. Has a physician contacted the school about your son or daughter's seizure problem?

6. What restrictions have you placed on him because of his seizure problem? Who suggested them?

7. What problems have you noticed in the home because of his seizure problem?

8. In what way is his taking medication a problem in the home?

9. How frequently would you say he misses his medication?

10. Do you feel there are any risks in his taking regular medication and what do you feel they are?

11. What is the age and sex of his closest sibling?

12. How does the patient compare with his closest sibling in terms of:

    a) School problems (identify)
    b) Health problems (identify)
    c) Problems with friends (identify)
    d) Discipline problems (identify)
    e) Getting along with other members of the family (identify)

Title: A SCREENING TOOL TO DETECT PSYCHOSOCIAL ADJUSTMENT OF CHILDREN WITH CYSTIC FIBROSIS

Authors: Rodgers, Beckett M., Ferholt, Julian, and Cooper, Carol L.

Variable: This instrument is designed to detect the presence or absence of a psychosocial adjustment problem in a school-age child with cystic fibrosis. A psychosocial adjustment problem is judged to be present when there is "an abnormality of behavior, emotions, or relationships which is sufficiently marked and sufficiently prolonged to cause handicap to child himself/herself and/or distress or disturbance in the family . . . and which is continuing up to the time of assessment." "Handicap" is broadly defined to mean "a disability which impedes the child in some way in his daily life" (Rutter et al., 1970).

Description:

Nature and Content: This semistructured parent interview consists of 34 open-ended questions and probes designed to elicit sufficient information about specific problems of the child so that the interviewer can rate each problem as mild or not present, moderate, or marked. The items covered by the questionnaire are organized into nine general categories: (1) health and hypochondriasis, (2) moods and emotions, (3) intrafamilial relationships, (4) reaction to and understanding of chronic illness by the child, (5) habits, mannerisms, and developmental problems, (6) family's reaction to and understanding of the chronic illness, (7) peer relationships, (8) self-management and independence, and (9) school adjustment and attitudes. Retrospective information is limited to the year previous to the interview, with many questions limiting the time variable to the previous 3 months.

The first question of the interview is open-ended and asks how the parent believes the child is doing "in general." The other 33 questions, more specific in nature, are also open-ended in order to allow for spontaneity and to obtain a broader understanding of the parent's frame of reference on the particular question. Probes are used with each question to elicit more specific and concrete responses. Most of the probes are individually designed to apply to the specific item; however, an overall probe heads each page of the instrument suggesting the pattern which additional questions should follow. The overall probe is: (1) when did the problem begin, (2) what made the problem better, (3) how often does the problem occur, (4) is the problem improving or getting worse, and (5) is the problem more than for most children his/her age?

Each answer to each question with the exception of question 1 is given a score of 1, 2, or 3—the number corresponding to the severity of the symptoms (1 = mild, 2 = moderate, 3 = definite or marked) or the frequency of the behavior discussed (1 = never, 2 = infrequently, 3 = frequently). A scoring key or scoring instructions are needed. For those items (8, 16, 17, 18, 22, 25, 26) which have four option choices, the author stated that in each case two of the four choices represented different ends of a continuum and each should be assigned a score of 3.

Development:

Rationale: Chronically ill children, when seen in specialty clinics, are often treated primarily for their physical problems, and little attention is given to their psychosocial well-being. The authors felt that the major obstacle to comprehensive health care was the absence of a reliable and valid tool which can easily and accurately detect—and hence allow treatment of—psychosocial problems.

Source of Items: The 34 questions of the parent interview were formulated to elicit a data base arbitrarily defined as clinically adequate for a study (Rodgers et al., 1974). Each question's phrasing and form was based on a clinical interview style derived from the experience of the investigators.

Procedure for Development: The items covered by the questions were organized into nine general categories. These categories were obtained by a factor-isolating scheme based on the literature review, with emphasis from the Graham and Rutter (1968) and the Glidewell et al. studies (1959).

Many questions, probes, and response choices were revised for greater clarity and specificity during pretesting. A nonspecific question such as the first item, it was found, tended to be answered in a nonspecific manner. This pointed out that a few open-ended questions asked by professionals could not generate sufficient data to accomplish adequate screening, much less lead to comprehensive care.

While pretesting the standardized parent interview, 27 of the 34 questions were found to be directly applicable both to children who were considered essentially "well" and to those who had other chronic diseases. During the pretest many of the other seven questions—those that dealt specifically with cystic fibrosis—were found to be revisable for use in studies of other chronic illnesses.

Reliability and Validity: A pediatric nurse practitioner and the author rated the answers to all questions for 15 subjects. On only two questions did agreement fall below 70 percent. The raters agreed 100 percent on 26 items, and agreement on the remaining 5 items ranged between 70 and 100 percent (Rodgers et al., 1974).

The measure may be assumed to have content validity in the sense that the items were derived from the literature dealing with latency-age children and children with cystic fibrosis. An indication of concurrent validity comes from the comparison of results from this parent interview, conducted by a pediatric nurse practitioner, with the judgment of a social worker based on an interview. Thirteen cases were reviewed, and the agreement was 100 percent on whether or not each of these children should be referred for further evaluation.

Use in Research: Rodgers, Ferholt, and Cooper developed the instrument, along with a self-administered teacher questionnaire and a parent demographic data form. Their use of the instruments are reported in their article referenced below.

Comments: The authors pointed out the small size of the sample. The implications of the sample size are that the results of the study and any conclusions drawn regarding the reliability and validity of the parent interview should be viewed tentatively.

One should also note that in many cases, the scoring scheme does not seem to be consistent with the questions, e.g., item 15; neither the question nor probes ask for frequency. Before using this instrument, one might plot simpler, more direct questions to elicit coded responses.

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Instrument Copyright: None.

Rodgers, Beckett M., Fernholt, Julian, and Cooper, Carol L.

A SCREENING TOOL TO DETECT PSYCHOSOCIAL ADJUSTMENT OF CHILDREN WITH CYSTIC FIBROSIS

Overall probe: a. When did the problem begin, b. what made the problem better, c. how often does the problem occur, d. is the problem improving or getting worse, e. and if problem is more than for most children his/her age.

Introduction:

Hello Mr. and/or Mrs. ________________. This is

who is taking part in this yearly evaluation of __________that

we wrote to you about.

As mentioned in the letters that were sent to you, we are doing a study in hopes that we will find a better means to meet families' needs. This extensive yearly evaluation is felt to be a needed aspect of a child's care. There is a formal policy of the hospital that any study or project involving patients must have a formal signature from the responsible party so as to be sure they were informed. I must also emphasize that all information we receive is strictly confidential. If some questions are hard to answer, please let us know. Are there any questions?

1. How are things going?
   Are there any problems about ____________you want to bring up?

If no, go on to the questions below.
If yes, find out: a. when did it begin, b. what made it better, c. how often if occurred, d. whether it is showing improvement or deterioration, e. and if they feel that the problem is more than with most children his or her age.

2. How would you describe your child's eating habits?

   Probe: Would you describe his pattern of eating as: 1. fussy-fads, 2. eating too much, 3. eating not enough, 4. other ____________________

   If yes, ask above: overall probe
      a. none of the above
      b. yes - mild
      c. yes - severe

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if problem is more than for most children his/her age.

3. What is bedtime like for ______________?
   Probe: Does he or she appear to have any sleeping difficulties? ie. do you notice that he has trouble falling to sleep at night, waking during the night or early in the morning, or any other difficulty?

   a. none of the above problems
   b. yes, but not more than once per week
   c. yes, more than once per week, more like every night

4. How often does the child feel sick?

   Probe: Is this unusual for him? What was the matter if he or she was not good? How often? (Since Sept. or last 3 months)

   a. Rarely feels sick except for usual childhood illnesses.
   b. Moderate - not more than once a month
   c. Terrible, - sick most of the time, more than once per month (average)

I'm going to be asking some specific questions now about some common health problems of children ____________'s age.

5. Does _________have stomach aches or vomiting?

   Probe: If positive answer, ask how often this occurs.
   If associated with anything.

   a. less often than once a month
   b. at least once per month
   c. at least once per week

6. Many children _______'s age complain of headaches at some time. Does _____________ever complain of any?

   Probe: If yes what seems to cause them and what seems to help them.
   How often:

   a. less often than once a month
   b. at least once per month
   c. at least once per week

7. Has _________wet his or her bed or pants within the last few months? or soiled himself, or lost control of his bowels?

   Probe: If parent looks puzzeled say that these questions are for a broad age group and some might not apply.

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if problem is more than for most children his/her age.

a. never in the past six months
b. less often than once per month
c. at least once per month

8. How much schooling has he or she missed since September? (count each series as one).

Probe: If yes, what is the usual cause for his absence?

a. never in the last 3 months
b. less often than once a month
c. at least once a month
d. more than once a month

If the above doesn't correspond with what was stated in question #4 state: I don't really understand, because you stated before that ______health was ____. Could you help make it clear for me?

9. Many children resist going to school or they may complain they don't feel well; they may show tears on arrival to school, or waste time on the way to school or in getting ready for school so as to be nearly late. Has this occurred with _______during the past three months?

a. never in the past three months
b. at least once a month
c. more than once a month

10. Most children at different times during their development develop different habits and mannerisms, have you noticed any with your son or daughter in the past three months?

Probe: For instance, I know that when I get excited I tend to repeat the first syllable of a word. Does this ever happen with _______?

a. never
b. when he or she becomes excited
c. often, even when not excited

11. Presently has ___________any habits such as biting his or her nails or sucking his or her thumb or fingers?

a. very infrequently to never
b. somewhat especially when tired
c. often and/or no particular times associated with it

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if the problem is more than for most children his/her age.

12. In the past three months has your son or daughter had any temper tantrums?

    Probe: What do you mean by temper? We mean complete loss of temper with shouting, angry movements, etc.

    a. less often than once per month
    b. at least once per month to twice per month
    c. more than twice per month

13. How would you describe your child's overall behavior?

    Probe: For instance, would you describe your child as:

    a. restless, squirmy, or fidgety - as if he can't sit still
    b. is he irritable and quick to fly off the handle
    c. is he fussy and overparticular than you would expect in children _________'s age

    a. applies definitely
    b. applies sometimes
    c. doesn't apply

14. Does your child have any special friends, other than his brothers and sisters, who he plays with?

    a. none
    b. one
    c. more than one

    Probe: If a or b what is the reason he hasn't more?

15. How does _________ get along with other children in general?

    Probes: Is he bullied or picked on, or does he bully others, other than brothers and sisters. What does bullied mean to you?

    a. never
    b. infrequently (not more than once per month)
    c. very frequently (more than once per month)

16. Does ___________ tend to do things on his own - rather solitary activities - during play times, such as after school or on the weekends?

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if the problem is more than for most children his/her age.

Probe: Does he spend most of his time by himself or does he spend most of his play time with his friends? Where and what does he spend most of his time doing? Can he entertain himself? Does he enjoy playing with other children?

a. about 3/4 to 1/4 or 1/2 to 1/2: friends to self
b. by self a lot 3/4 and with friends sometimes 1/4
c. always by self (check to see if this is due to no one his/her age in the neighborhood)
d. never by self - doesn't enjoy being alone and doesn't know what to do with self when he/she is

17. How does he/she react to new people, places, or activities?

a. tends to be hesitant but usually willing
b. tends to enjoy new experiences and seeks
c. tends to be afraid and trys to avoid
d. attempts to take risks and not as cautious as one ought to be

18. When ________has a problem that he/she can't solve, how does he/she handle it?

Probe: For example, if he had a homework problem that he is having difficulty with, what would he do, how would he act?

a. tries for reasonable period of time and then refers to you for assistance
b. struggles with it for a while but longer than you would expect and then finally will ask for help
c. quits without even trying
d. struggles with it and will not bring it to you

19. Most children have happy and sad moods. I was wondering if you could describe _________when she/he is in a sad mood?

Probe: What would make her/him unhappy, how often do you feel that your child appears unhappy or distressed?

a. not more than once per month - related to denial of privileges or other direct reason and definitely passes quickly
b. at least once per week with no apparent reason, and/or does not pass quickly, will mope for a while
c. almost every day - no apparent reason and lengthy

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if the problem is more than for most children his/her age.

20. Does your child frequently fight with other children? (other than brothers and sisters).

Probe: Fight means different things to different people. What does it mean to you? If so, how often?

a. almost never in last three months
b. at least once per month
c. at least once per week

21. Does _________ ever tell lies or fibs?

Probe: How often

a. almost never in the last three months
b. not more than 2 or 3 times/month
c. at least once per week

22. Is your child ever disobedient for you and your spouse?

Probe: How much insistance is needed - disobedient means different things to different people - what does it mean to you?

a. usually does what is expected but will on occasion be disobedient
b. frequently disobedient but will do it with much insistance
c. no independence always obeys
d. will not do what is asked even with much insistance

23. Some school aged children steal on occasion. Are you aware of that kind of behavior in your child?

Probe: If acknowledges above, ask if they do anything about it

a. not in last year
b. once in last year
c. more than once in last year

24. Do you feel that your child is often worried or worries about many things?

Probe: What does worried mean to you (troubled, anxious, nervous)? Do you feel that your child is troubled, anxious, or nervous about anything?

a. sometimes but infrequently
b. more than expected, less than once a week - not preoccupied
c. most of the time - one or greater than once per week

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if the problem is more than for most children his/her age.

25. When he/she is worried or has a problem does he/she ever talk to you or your husband about it?

  a. discusses it if it is really bothering him - not minor ones, or when asked
  b. only very rarely - once or twice a year
  c. never brought out even when asked
  d. always telling us his worries no matter how trivial

26. Does _________ take responsibility for:
1. homework, 2. household chores, 3. dressing, 4. cleanliness

  a. sometimes spontaneously and also with reminding - up to 1/2, 1/2
  b. will but with threats or reminding - rarely on own
  c. never takes any of the above responsibilities
  d. never needs reminding, always does everything

27. What does ___________ know about his/her cystic fibrosis?

  a. little - just that she/he has to go to the doctors
  b. some understanding - knows about treatment, medication, etc., but primarily does not know diagnosis or prognosis (chronicity)
  c. good understanding - symptoms and chronicity as well as treatment and medication

28. What specifically have you told him or her about cystic fibrosis?

  a. haven't told him/her anything - tries to avoid and deceive child
  b. told child some facts about his disease but overly optimistic and avoids any discussion of fear of dying
  c. have been very open with their child and tried to answer questions even about death and incurability.

29. Sometimes children with C/F go through periods when they resist postural drainage or refuse or hide medication. Has _______________ had such a period?

  a. never in the past three months
  b. at least once per month
  c. more than once per month

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if the problem is more than for most children his/her age.

30. What do the other members of the immediate family know about the disease?

Probe: Has it been discussed?

a. openly discussed
b. mentioned but not as whole family and/or incompletely discussed
c. do not discuss - closed topic

31. Many mothers have stated that they are depressed. Do you feel this to be true?

Probe: What do you mean by depressed - hopeless, resigned, feel like giving up.

a. once per month
b. once a week
c. almost every day - more than once per week

32. How do you and your husband share for ____________care?

a. mother gives almost all care
b. father interested and does some care sporatically
c. almost half and half when father is home from work

33. How does ___________get along with his or her sisters and brothers?

Probe: Is there excess rivalry (competition)? Have you noticed the other children trying to get your attention by pretending to be ill or misbehaving?

a. more than you would expect
b. same as you would expect
c. less than you would expect

34. Has this problem strained your relationship with your husband and your wife?

Probe: Has _____________having C/F placed any strain on your relationship with your husband/wife. If so, how?

a. yes most definitely
b. somewhat but feel we can manage it
c. has brought our family closer together

I've asked you a lot of questions, do you have any for me?

Overall probe: a. When did it begin, b. what made it better, c. how often does it occur, d. is it improving or getting worse, e. and if problem is more than for most children his/her age.

35. Has any teacher or doctor ever recommended that __________ should be given any type of psychological treatment or evaluation?

yes
no

If yes, when and why.

Title: HEALTH STATUS OF RHEUMATIC PATIENTS

Author: Schaefer, Joanne L.

Variables: A rheumatic patient's health status as perceived in terms of pain, suffering, physical limitation, and social isolation are measured by this instrument. The following definitions were provided by Schaefer (1973).

Pain: any uncomfortable physical sensation.

Suffering: the reaction to pain.

Physical limitation: any restriction of a person's ability to meet needs and perform common daily tasks.

Social isolation: a condition of the deprivation of satisfaction-giving interpersonal activity.

Patients with rheumatic disease: persons with any diagnosis or syndromes classified by the American Rheumatism Association, usually involving joints and/or para-articular structures.

Description:

Nature and Content: The questionnaire consists of 64 items and was designed to be self-administered by persons with rheumatic disease. The first items cover demographic information.

The next 10 items are questions dealing with medical care, especially as related to the patient's rheumatic condition. For example, the respondent is asked, "Do you receive medical care for other than your rheumatic condition?"; answer choices are Yes or No. The patient is then asked, "If yes, what is the source of this care?"; five response alternatives are presented: private physician, outpatient clinic, emergency room, health maintenance group, and neighborhood health center.

Four items refer to the kinds of medications the respondent is taking and his/her reaction to them. The respondent's health status is evaluated in five items. Seven items refer to the kind of pain the respondent is experiencing. Seven items refer to the respondent's suffering or reaction to pain. The respondent's physical limitations are assessed by five items. Fifteen items measure the respondent's degree of social isolation and his present mental condition.

Administration and Scoring: The questionnaire is self-administered and can be completed in approximately 30 to 45 minutes by any literate person. Respondents with physical disabilities may need assistance in marking their answers.

Four sets of items are scored to yield indices of pain, suffering, physical limitations, and social isolation for each respondent.

Of the seven items relating to pain, six had five response choices and one allowed four choices. Responses indicating the least distress resulting from pain received a score of 1 (or 2 in the case of the items with four choices), while responses indicating the most distress are assigned a score of 5. These are summed across items to yield an index that ranges from 8 to 35.

Fourteen items or parts of items related to physical limitations receive scores of 1 (least limited) to 4 (most limited), resulting in an index with a range from 14 to 56.

Finally, 13 of the 15 items dealing with social isolation receive scores of 1 (least isolated) to 3 (most isolated). Two additional questions have two response alternatives; positive responses are assigned scores of 2 and negative responses receive scores of 1. The index ranges from 15 to 41.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: The items were based upon a review of the literature, patients' suggestions and comments, and the author's professional experience.

Procedure for Development: A draft of the questionnaire was submitted to several professional nurses and physicians for suggestions. Based upon those suggestions, the questionnaire was revised to its present form.

Reliability and Validity: No information on reliability was provided. The instrument has content validity based upon the source of the items and the input from professional health care personnel.

Use in Research: The development and use of the instrument are described in the author's master's thesis referenced below. The instrument was given to potential subjects by the researcher during patients' regularly scheduled visits to the Rheumatology Clinic at the Arizona Medical Center. The subjects returned the completed instrument by mail (Schaefer, 1973).

Comments: The questionnaire can be completed easily, for instructions to the respondent and appropriate examples are provided throughout; however, its length may prove to be a deterrent to many potential respondents. The indices for pain, suffering, physical limitations, and social isolation appear to have face validity, but any psychometric assessment of these scales has yet to be done.

References:

Schaefer' Joanne L. *Perceived health among rheumatic patients.* Unpublished master's thesis, University of Arizona, 1973.

Source of Information:

Joanne L. Schaefer
131 Lowell Court
O'Fallon, Ill. 62269

Instrument Copyright: None.

Schaefer, Joanne L.

HEALTH STATUS OF RHEUMATIC PATIENTS

THE FOLLOWING QUESTIONS SEEK TO OBTAIN SOME GENERAL INFORMATION ABOUT YOU, YOUR HEALTH, AND YOUR MEDICAL CARE.

PLEASE FILL IN THE BLANK(S) OR PLACE A CHECK (✓) BESIDE THE APPROPRIATE RESPONSE FOR THE FOLLOWING QUESTIONS:

1. How old were you on your last birthday? ____ years

2. Sex:
   - Female ____
   - Male ____

3. Marital status:
   - Married living with spouse ____
   - Separated ____
   - Divorced ____
   - Widowed ____
   - Never been married ____

4. What is the highest grade of school that you completed? (Circle one.)
   - None 0
   - Elementary 1 2 3 4 5 6 7 8
   - High School 9 10 11 12
   - College 1 2 3 4
   - Professional or Graduate 1 2 3 4 5+
   - Technical 1 2
   - Other (specify) ____________

5. What is the name of the place where you live? ____________________

6. What is the size of the community in which you currently live?
   - Under 1,000 ____
   - 1,000 to 10,000 ____
   - 10,000 to 30,000 ____
   - 30,000 to 50,000 ____
   - 50,000 to 100,000 ____
   - 100,000 to 200,000 ____
   - 200,000 to 400,000 ____
   - Over 400,000 ____

7. How many years have you lived in ____? ____ years.

8. If you do not live in ____ how many miles from ____ do you live? ____ miles.

9. Did you come to ____ to seek relief for your rheumatic condition?
   - Yes ____
   - No ____

10. What is the name of your rheumatic condition? ____________________

PLEASE PLACE A CHECK (✓) BESIDE THE MOST APPROPRIATE RESPONSE FOR THE FOLLOWING QUESTIONS.

11.	Do you receive medical care for other than your rheumatic condition?	Yes	____
		No	____
12.	If yes, what is the source of this care?	Private Physician	____
		Outpatient Clinic	____
		Emergency Room	____
		Health Maintenance Group	____
		Neighborhood Health Center	____
13.	How often do you consult a doctor for care other than for your rheumatic condition?	Weekly	____
		Monthly	____
		Every 3 months	____
		Every 6 months	____
		Once a year	____
		Less than once a year	____
14.	Have you had a complete physical examination during the past year other than at the Rheumatology Clinic?	Yes	____
		No	____
15.	If yes, what is the source [illegible] this care?	Private Physician	____
		Outpatient Clinic	____
		Emergency Room	____
		Health Maintenance Group	____
		Neighborhood Health Center	____
16.	If no, when did you last have a complete physical examination?	____ (Year)	
17.	Do you receive medical care for your rheumatic condition anywhere other than ____________________?	Yes	____
		No	____
18.	If yes, what is the source of this care?	Private Physician	____
		Outpatient Clinic	____
		Emergency Room	____
		Health Maintenance Group	____
		Neighborhood Health Center	____
19.	How often do you consult a doctor for your rheumatic condition?	Weekly	____
		Monthly	____
		Every 3 months	____
		Every 6 months	____
		Once a year	____
		Less often than once a year	____
20.	Are you taking any medications at the present time?	Yes	____
		No	____

20A. If yes, please list below the NAME of every medication that you are taking at this time. Place all of the drugs for which you were given a prescription by your doctor in the FIRST column and all of the drugs that you can buy without a prescription in the SECOND column.

DRUGS REQUIRING PRESCRIPTION FROM PHYSICIAN	DRUGS NOT REQUIRING PRESCRIPTION FROM PHYSICIAN
___ 1. ____________	___ 1. ____________
___ 2. ____________	___ 2. ____________
___ 3. ____________	___ 3. ____________
___ 4. ____________	___ 4. ____________
___ 5. ____________	___ 5. ____________
___ 6. ____________	___ 6. ____________
___ 7. ____________	___ 7. ____________
___ 8. ____________	___ 8. ____________
___ 9. ____________	___ 9. ____________
___ 10. ____________	___ 10. ____________

21. Using the above list of drugs, please check each drug that your doctor told you to take for your rheumatic condition. (Please check (✓) in front of the number of the drug.)

EXAMPLE: ✓ 1. Indocin
___ 2. Nitroglycerine

THE FOLLOWING QUESTIONS REFER TO THE MEDICATIONS YOU ARE TAKING FOR YOUR RHEUMATIC CONDITION. PLEASE PLACE A CHECK (✓) BESIDE ALL APPROPRIATE RESPONSES FOR EACH ITEM.

22. Are there any medications for your rheumatic condition that you are supposed to be taking but are not taking at this time?

Yes ___
No ___

23. If yes, why did you discontinue taking the medication?

The drug did not help ___
The drug made me dizzy ___
The drug caused: nausea ___
vomiting ___
swelling ___
skin rash ___
bleeding ___
Other (Please specify) ___

____
____

24. Please list the names of all the drugs that you are taking at this time for your rheumatic condition.

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
9. ____________________
10. ____________________

NOW FOR A FEW QUESTIONS ABOUT YOUR HEALTH. PLEASE FILL IN THE APPROPRIATE RESPONSE.

25. At any time during the past three years have you had any hearing loss?
Yes ____
No ____

26. If yes, what did you do when you had the loss of hearing?

____

____

____

27. At any time during the past three years have you had any visual disturbances?
Yes ____
No ____

28. If yes, what did you do when you had the visual disturbance?

____

____

____

29. Do you think your present health status is . . . .
Excellent ____
Good ____
Fair ____
Poor ____

Part Two

ALL OF THE QUESTIONS BELOW PERTAIN TO YOUR RHEUMATIC CONDITION. PLEASE PLACE A CHECK (✓) BESIDE THE WORD(S) THAT MOST NEARLY DESCRIBES YOUR OWN SITUATION.

31. How often do you ever have pain due to your rheumatic condition?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____
(If never go to Question 45)

THE FOLLOWING QUESTIONS RELATE TO THE KIND OF PAIN THAT YOU HAVE MOST OF THE TIME. I AM NOT REFERRING TO THE ACUTE FLAREUPS THAT YOU MAY OCCASIONALLY HAVE.

32. How would you describe your pain?

Dull ____
Aching ____
Burning ____
Piercing ____
Sharp ____

33. Would you describe the intensity of the pain that you usually have as . . . .

Very slight ____
Mild ____
Moderate ____
Severe ____
Excruciating ____

34. How often do you take medication for your pain?

Daily ____
2-3 different days a week ____
Weekly ____
2-3 different days a month ____
More than 3 different days a month ____

35. How often does your pain cause you to limit your physical activity?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

THE FOLLOWING SERIES OF QUESTIONS PERTAIN TO THE PAIN THAT YOU HAVE MOST OF THE TIME. PLEASE PLACE A CHECK (✓) BESIDE THE WORD(S) THAT MOST NEARLY DESCRIBES WHAT HAPPENS WHEN YOU ARE HAVING THIS PAIN.

WHEN YOU ARE HAVING THIS PAIN . . .

36. How often does your pain cause you to moan?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

WHEN YOU ARE HAVING THIS PAIN . . .

37. How often does your pain cause you to become weepy?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

38. How often does your pain cause you to cry?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

39. How often does your pain affect your relationships with your family and/or friends?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

40. How often does your pain interfere with your social activities?

Almost always ____
Frequently ____
Seldom ____
Rarely ____
Never ____

FOR THE FOLLOWING FOUR QUESTIONS PLEASE PLACE A CHECK (✓) BESIDE ALL THE ANSWERS THAT APPLY TO YOUR OWN SITUATION.

(Check as many as may apply to you)

41. Have you ever had pain that caused you to have any of these symptoms?

Paleness ____
Perspiration ____
Shakiness ____
Stiffening ____
Faintness ____

42. Has your pain ever caused you to become . . . .

Tired ____
Impatient ____
Discouraged ____
Restless ____
Dejected ____

THE FOLLOWING QUESTIONS REFER TO THE SAME KIND OF PAIN REFERRED TO IN QUESTIONS 41 AND 42.

43. What do you usually do when you start having pain?

Do you rest briefly before continuing with your activity? ____

Do you take medication and then continue with your present activity? ____

Do you take medication and then change to an easier activity? ____

Do you take medication and then go to bed? ____

44. What is your usual reaction to pain?

(Check as many as may apply to you)

Fatigue ____
Irritability ____
Frustration ____
Anxiety ____
Depression ____

NOW FOR A FEW QUESTIONS RELATING TO HOW WELL YOU ARE ABLE TO TAKE CARE OF YOURSELF. PLEASE PUT A CHECK (✓) IN THE COLUMN THAT MOST NEARLY DESCRIBES THE AMOUNT OF HELP YOU NEED TO DO THE TASKS LISTED BELOW.

EXAMPLE: MINIMAL ASSISTANCE - requires help with zippers and buttons but can dress self

PARTIAL ASSISTANCE - needs some help with bathing and/or dressing as well as with zippers and buttons.

45. TASKS	NO ASSISTANCE	MINIMAL ASSISTANCE	PARTIAL ASSISTANCE	COMPLETE ASSISTANCE
A. Dressing	___	___	___	___
B. Bathing	___	___	___	___
C. Grooming	___	___	___	___
D. Toileting	___	___	___	___
E. Laundering	___	___	___	___
F. Cooking	___	___	___	___
G. Eating	___	___	___	___
H. Taking own medications	___	___	___	___
I. Doing light housekeeping	___	___	___	___
J. Shopping	___	___	___	___

THE NEXT FEW QUESTIONS RELATE TO HOW WELL YOU ARE ABLE TO MOVE ABOUT. PLEASE PUT A CHECK (✓) BESIDE THE WORD(S) THAT MOST NEARLY DESCRIBES YOUR OWN SITUATION.

46. Are you able to get around your home . . . . .

Independently ____
With a cane or walker ____
With a wheelchair ____
With a wheelchair and another person ____

PLEASE PLACE A CHECK (✓) BESIDE THE WORD (S) THAT MOST NEARLY DESCRIBES YOUR OWN SITUATION.

47. How much assistance do you need to travel outside of your home?
    - No assistance ____
    - With a cane or walker ____
    - With the aid of a device and another person ____
    - Must be carried or use a lift ____

48. How often does your rheumatic condition prevent you from working? (Either at home or on the job)
    - Very often ____
    - Often ____
    - Not too often ____
    - Not at all ____

49. How does your rheumatic condition restrict your work?
    EXAMPLE: Changed type of work--
    Homemaker no longer able to do heavy work.
    Office worker who can't type but can file.
    - No restriction ____
    - Changed type of work ____
    - Forced part time work ____
    - Caused retirement ____

THE FOLLOWING SERIES OF QUESTIONS RELATE TO HOW YOU HAVE FELT DURING THE PAST YEAR. PLEASE PUT A CHECK (✓) BESIDE THE WORD(S) THAT MOST NEARLY DESCRIBES HOW YOU HAVE FELT.

DURING THE PAST YEAR. . . . .

50. How satisfied have you been with your life?
    - Very satisfied ____
    - Not too satisfied ____
    - Not at all satisfied ____

51. How often have you been sad?
    - Very often ____
    - Often ____
    - Not too often ____

52. How often have you had trouble falling asleep?
    - Very often ____
    - Often ____
    - Not too often ____

53. How often have you felt lonely?
    - Very often ____
    - Often ____
    - Not too often ____

54. How often have you become easily irritated?
    - Very often ____
    - Often ____
    - Not too often ____

55. How often were you discouraged?
    - Very often ____
    - Often ____
    - Not too often ____

56. How much contact did you have with your family and friends?

Very often ____
Often ____
Not too often ____

57. How much of the time were you depressed?

Very often ____
Often ____
Not too often ____

58. How much energy did you have to do those activities that you enjoyed doing?

Enough ____
Barely enough ____
Not enough ____

59. How often did you have the urge to cry as compared to the previous year?

More often ____
About the same ____
Less often ____

60. How satisfied were you with your leisure time activities?

Very satisfied ____
Not too satisfied ____
Not at all satisfied ____

PLEASE PLACE A CHECK (✓) BESIDE THE WORD(S) THAT MOST NEARLY DESCRIBES YOUR PRESENT SITUATION.

61. How would you compare your satisfaction with life now as compared to two (2) years ago?

More satisfied ____
About the same ____
Less satisfied ____

62. What kind of activities do you do during your leisure hours?

Watch television ____
Listen to music ____
Read ____
Play cards ____
Knit, sew ____
Play tennis ____
Swim ____
Play golf ____
Other (specify) ____

____

____

63. Do you have times when you feel sad, lonely, depressed or discouraged?

Yes ____
No ____

64. If yes, what do you do when you feel sad, or lonely, or depressed, or discouraged? ______________________________

____

____

____

____

Title: HEALTH STATUS QUESTIONNAIRE

Authors: Schmid, A. Allan, Kiene, Werner, and Updegraff, Gail

Variable: The health status of a person as indicated by data concerning health history, work history, and, in the case of children, school and play activities, is the variable under study.

Description:

Nature and Content: This survey instrument was developed and used to assess the impact of a comprehensive rural health clinic upon the people of the area it served.

The instrument is divided into two parts. Items A through Y elicits background information about the subject and the subject's household. Many of the items have multiple parts, and the items follow a variety of formats, e.g., some are listings, some are "yes" or "no" items, and some have Likert-type response choices. Items 1 through 42 elicits data directly related to health status, with items 34 through 42 relating specifically to the health status of school age children (6-17 years).

Administration and Scoring: The instrument is administered by personal interview. However, some of the needed data may be obtained from school records and places of employment.

This instrument was developed for use in a community survey and no scoring procedures have been developed.

Development:

Rationale: No widely-accepted descriptors exist for comparing the impact of the services of a recently founded health care clinic with that of the previous traditional health care system or the health care system in other areas. This survey instrument was developed in an attempt to quantify some of the information the authors deemed necessary to assess the value of such a health care clinic. (Schmid et al., 1973).

Source of Items: No information was provided.

Procedure for Development: No information was provided.

Reliability and Validity: No information was provided.

Use in Research: The study for which this instrument was developed and used is reported in Schmid et al. (1973), referenced below. The comprehensive health clinic located in Baldwin, Lake County, Michigan, had been in existence for 5 years at the time of the study and provided the following services: medical and dental care, laboratory and X-ray services, alcoholism counseling, community health education, family services, transportation, emergency room services, consultant, and inpatient services.

Comments: This is a very general survey instrument, and it does not purport to be more. It could be adapted and psychometrically refined by other health care centers to fit their specific objectives and services.

The authors indicated that one of the problems encountered with use of some of the items was that the items centered on recall and self-classification. Research on questionnaires suggests that the reliability of data based on an individual's memory recall drops sharply after a few weeks (Schmid et al., 1973).

References:

Kiene, Werner. *Evaluation of the impact of health care on activity levels of rural poor.* Unpublished doctoral dissertation, Michigan State University, 1972.

Schmid, A. Allan, Kiene, Werner, and Updegraff, Gail. *A comprehensive rural clinic: Case study of public program evaluation methodology.* East Lansing: Michigan State University, 1973.

Source of Information:

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East Lansing, Mich. 48824

Instrument Copyright: None.

Schmid, A. Allan, Kiene, Werner, and Updegraff, Gail

HEALTH STATUS QUESTIONNAIRE

HOUSEHOLD

a) Before we start, I'd like to find out something about who lives in your household. Let us start with the head of the household:

For each household member, complete first line on "Member" questionnaire:
1) Fill in # of household member.
2) First name.
3) Relationship: "head," "spouse," "children."
4) Age, sex.

b) Is there anyone else who usually lives with you?

c) How long have you and the members of your household been in this county?

[1] Longer than 5 years → (d)
[2] Longer than 1 year → "Member" questionnaire
☐ Shorter than 1 year → "Exit" interview

d) List those members of your household who moved into this county during the last 5 years.

	Relation to head of household	From where did ____________ come	When
1)			
2)			
3)			

e) Go to "Member" questionnaire. Finish "Household" questions at the end of the interview.

f) List those of your family who are presently in a hospital, home for the aged or extended care facility:

Name	Age	Sex	Relation to head of household	What facility is ___________ in?	Since when has ______ been there?
1)					
2)					
3)					

→ g) List those members of your household who have died in the past 5 years:

Name	Age	Sex	Relation to head of household	When died	Did ____ live with you during the last year of his life?
1)					☐ YES ☐ NO
2)					☐ YES ☐ NO
3)					☐ YES ☐ NO

h) The next questions are related to housing.

i) Did you have a working bath tub or shower during the last year? ☐1 YES ☐2 NO

j) Did you have a working bath tub or shower 5 years ago. ☐1 YES ☐2 NO

k) Did you have a working flush toilet during the last year? ☐1 YES ☐2 NO

l) Did you have a working flush toilet 5 years ago. ☐1 YES ☐2 NO

m) If you compare last year with 5 years ago, did your heating
☐1 improve since ____?
☐2 stay the same?
☐3 worsen?

n) Now I would like to ask you a few questions related to nutrition and health services.

o) If you compare this year with 5 years ago, do you as an individual now eat
☐1 more meat ☐2 same ☐3 less
☐1 more milk ☐2 same ☐3 less
☐1 more vegetables ☐2 same ☐3 less

p) Has your family's nutrition improved since 5 years ago? ☐1 YES ☐2 NO

q) Would members of your household visit the doctor more frequently if you had more income or if doctor services were more readily available?
☐1 YES ☐2 NO

r) During the last year, how would you rate the availability and quality of health care in this area? Choose a position on the scale.

Present Date			Previous Five-Year Date	
+3	6	good	6	+3
+2	5		5	+2
+1	[illegible]		4	+1
- - - -	- - - -	- - - -		
-1	3		3	-1
-2	2		2	-2
-3	1	poor	1	-3

s) Where would you place availability and quality of health care in ___? better than now? worse than now? How many levels up or down would you place it in ____?

t) If there was a change between (5 years ago) and (present date), what caused it? LIST.

u) With the next question we would like to find out how your income situation has changed since (5 years ago)?

v) Do you think that since ____ your household's income situation has:

1 improved? 2 stayed the same? 3 worsened?

w) What was the highest level of education completed by the head of the household? LIST:

OBTAIN FROM RECORDS:

x) 1 Black Not on Assistance 2 White Not on Assistance 3 Black On Public Assistance 4 White On Public Assistance

y) 1 Not enrolled in Health Center Blank Enrolled in Health Center

MEMBER

First Name:____________ Relationship to head of household____________ Age:________ Sex:________

1) If you compare_______'s health with that of other people of his/her age and sex, how would you rank_______on the following scale for the past 12 months?

Present Date		Previous Five-Year Date
+3 ☐	above average	☐ +3
+2 ☐		☐ +2
+1 ☐		☐ +1
- - - -	- - -	
-1 ☐		☐ -1
-2 ☐		☐ -2
-3 ☐	below average	☐ -3

2) How would you rank ________'s health five years ago? Better than now? Worse than now? How many levels up or down would you place ________ five years ago?

3) If there was a change between 5 years ago and present, what caused it? LIST:

4) Did ________ have a general physical exam or a medical checkup since five years ago?

☐1 YES ☐2 NO

5) Did ________ have a dental checkup during the past 12 months?

☐1 YES ☐2 NO

6) How many times did ________ go to a dentist during the past 12 months?

☐ TIMES

7) How many times did ________ go to a doctor or health worker during the past 12 months?

☐ TIMES

8) Is _______'s activity limited in any way because of disability or health?

[1] YES [2] NO→(13)

9) What can _______ not do because of disability or health? LIST:

10) What are the health conditions that caused this limitation? LIST:

	MONTHS	YEARS

11) About how long has _______ been that way? How many months? How many years?

12) Does _______ need help from another person getting around inside or outside the house?

[1] YES ☐ NO

→ 13) AGE: 0-17 years → (34) 18 and over → (14)

14) In terms of health, is _______ able to work at all around the house?

☐ YES [2] NO

15) Is _______ limited in the kind of home activities because of health?

[3] YES ☐ NO

16) Is _______ limited in the hours spent on home activities because of health?

[4] YES [5] NO

17) On how many days of the past 365 days did illness or injury keep _______ from the things he/she usually does around the house?

☐ DAYS

18) Age 66+ → (EXIT); otherwise go to (19).

→ 19) Do health conditions keep _______ from being employed or self-employed?

[2] ⑥ YES ☐ NO

20) Is _______ limited as to occupation or kind because of health?

[3] ⑦ YES ☐ NO

21) Is _______ limited in the amount of work he/she can do because of health?

[4] ⑧ YES [5] ⑨ NO

22) Was _______ employed at all during the last year?

☐ YES ☐ NO →(EXIT)

23) On how many days of the past 365 days did illness or injury keep ________ from the things he/she usually does at home and on the job?

☐ DAYS

24) Is _______ self-employed? ☐1 YES ☐2 NO ⟶ (26)

25) The next questions are about your employment. Please, think of the word "employed" to include the total of outside employment plus self- employment.

⟶ 26) Let us go over the past year, month for month, and find out how many weeks per month ________ worked during the last year.

27) How many weeks was __ employed (plus self-employed) during month of:	28) How many days per week was ___ employed (plus self-employed) during that time?	29) How many hours per day was __ employed (plus self-employed) during that time?	30) Why was __ not employed (or self-employed) full-time during that period? (paid vacation--employed)	31) List for each month the number of days when illness or injury kept ____ from the usual days employed
Sept.				
Oct.				
Nov.				
Dec.				
Jan.				
Feb.				
March				
April				
May				
June				
July				
August				
				ADD:

32) Speaking in general terms, how would you describe ______'s employment and self-employment during the past year?

☐1 Full-time ☐2 1/4 Time ☐3 1/2 Time

☐4 1/4 Time ☐5 No Job

33) Did ________ have more employment and self-employment in the past year than 5 years ago?

☐1 More than 5 years ago

☐2 Less than 5 years ago

→ 34) Is ______ able to take part at all in ordinary play with other children?

☐ YES [2] NO

35) Is he limited in the kind of play because of his health?

[3] YES ☐ NO

36) Is he limited in the amount of play because of his health?

[4] YES [5] NO

37) IF AGE 6-17 OTHERWISE GO TO → (42).

38) In terms of health, would _______ be able to go to school?

☐ YES [2] NO

39) Does _______ have to go to a certain type of school because of health?

[3] YES ☐ NO

40) Is _______ limited in school attendance because of health?

[4] YES [5] NO

41) If _______ goes to school, on how many days of the past school year did illness or injury keep _______ from going to school?

☐ DAYS

→ 42) On how many days of the past 365 days did illness or injury keep _______ from playing as usual and from going to school?

☐ DAYS

Client Biopsychosocial Health Status: Sociobiological Functioning

Title: PERSONAL AND SOCIAL COMPETENCE INVENTORY

Author: Anderson, Catherine J.

Variables: The variables measured by the inventory are personal and social competence among long-stay, socially regressed, psychotic patients.

The variables are defined as follows: (1) *personal competence*—basic hygiene and habits such as bathing, toileting, feeding, and sleeping; (2) *personal responsibility*—caring for belongings, taking medication, and understanding assignments; (3) *social competence*—including social behavior, interaction, and participation in activities; (4) *community orientation*—going shopping, taking buses, and attending activities in the city independently (Anderson and Sainato, 1973).

Description:

Nature and Content: The inventory consists of 25 rating scales grouped under five headings as described in *Variables* above. Each rating scale has five answer categories (0-4) which have descriptive phrases to define each point. The method used to determine the 5 points of the scale is not given.

One page identifies information about the patient and about the patient's home situation. A very short set of instructions is provided for raters. A guide for using this inventory is provided but the guide provides for *only* a somewhat detailed exposition of the most positive rating category.

Personal and social competence is operationally defined by the inventory as the sum of personal competence (includes hygiene and grooming, appearance and dress, behavior at meals, sleeping habits, and toilet habits); personal responsibility (includes caring for clothing, taking medications, handling money, caring for personal belongings, and undertaking and completing assignments); social competence (includes self-confidence, social behavior, social interaction, observing standards of conduct, and participation in activities); social responsibility (includes participation in goal-setting, conformity to norms, group relatedness, job responsibility, and financial responsibility); and community orientation (includes use of privileges, shopping, transportation, community activities, and social visits).

Administration and Scoring: Nurses or aides who have had adequate opportunity to observe the patient, check the category on each scale that best represents the patient's position on the stimulus variable. Although the author of the scale indicates that each patient should be rated by staff from all shifts, there is no indication as to how the ratings from several raters are to be combined into a "score" for the patient. The author indicates that completion of the scale takes 30 minutes or less.

The inventory yields six scores: a total score with a possible range of 0 to 100, and a score on each of the five subscales that can range from 0 to 20. Low scores on the inventory indicate high levels of personal and social competency since the point on each scale that represents the most desirable behavior is assigned a value of 0 and that of the least desirable behavior is assigned a value of 4.

Development:

Rationale: Some patients return to the hospital because they fail to assume self-responsibility in routine aspects of daily living, not because of the recurrence of psychoses. Long-term patients usually adapt to routinized patterns of institutional life with a consequent dependency and loss of self-esteem. They are characterized by a low level of competency in basic self-care activities and "disuse atrophy" of social skills. These include inappropriateness in areas such as dress, grooming, hygiene, toileting, eating, sexual behavior, social interaction, use of money, care of belongings, and use of free time. The inventory was designed to identify the patient's inappropriateness in these areas in order to help the patient overcome his incompetency and therefore return to normal social life more easily (Anderson and Sainato, 1973).

Source of Items: The items of the inventory were derived from Eli Chinoy's suggestion of a self-regulating conscience incorporating social values and from Alex Inkeles' theory of social competence (Anderson and Sainato, 1973)

Procedure for Development: The procedure for development was not specified by the author except to state that the instrument was pretested and refined for several months before it was used in the study for which it was designed. One aspect of the pretesting was the training of raters, but the author does not specify the nature of the training used to obtain an interrater agreement of 90 percent.

Reliability and Validity: The author reports interrater agreement of 90 percent for total score ratings of 10 subjects by 16 nursing staff. However, it is not clear how this level of agreement was obtained or how long it was maintained. Rater agreement on individual items ranged from 75 percent to 98 percent. Rater agreement on the five subscales are not reported. No other reliability data are reported.

No content validity is reported. Data in the Anderson and Sainato study (1973) indicated statistically significant differences in mean total scores between 24 patients who remained in the hospital, and 23 patients who were later placed on leave. These differences indicate that the instrument may have some construct validity.

Use in Research: The inventory was used by Anderson and Sainato in a study to measure the effect of videotape feedback on the resocialization of long-term psychiatric patients. The 18-month study was conducted at St. Elizabeth's Hospital, Washington, D.C. The study sample consisted of 20 males and 30 females, with an age range of 21 to 63 years and a mean age of 43.27 years. The length of hospital stay ranged from 3 to 24 years, with a mean stay of 14.10 years. Forty-six of the subjects had been diagnosed as schizophrenic; four had other psychiatric disorders.

Comments: The potential user of this instrument should examine each of the rating scales carefully to determine whether the operational definition of personal and social competence used by the authors is relevant to the user's needs and purposes. The categorical statements for each point on each rating scale need to be brought into closer congruence with the definitions of each stimulus variable given in the *Guide for Using Patient Competence Inventory*, since some of the scales appear to use only part or none of the given definitions.

Some of the scales do not represent continua of behavior; for example, the five categories of the scale on sleeping habits are: (0) sleeps normally without sedation; (1) sleeps normally with sedation; (2) restless, wakeful but remains quiet; (3) sleeps in unusual places, clothing, or times; and (4) restless, noisy, disturbs others. Number (3) represents entirely different behaviors than do the other categories. The scoring categories for each rating scale need validation.

The user will probably need to develop more extensive guides for raters. Additional reliability and validity evidence needs to be established. However, if an investigator is interested in the same indices of personal and social competency as this instrument covers, it can provide an initial starting point for an instrument.

References:

Anderson, C. J., and Sainato, H. K. Use of videotape feedback as a psychotherapeutic nursing approach with long-term psychiatric patients: A pilot study. *Nursing Research*, 1973, *22* (6), 507–515.

Source of Information:

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Instrument Copyright:

The American Journal of Nursing Company
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New York, N.Y. 10019

Anderson, Catherine J.

PERSONAL AND SOCIAL COMPETENCE INVENTORY

Patient's Name____________________

Rater's Name______________________

Date___________________________

I. *Personal Competence*

1. *Hygiene and Grooming*

Keeps self clean well groomed	Keeps self clean, poorly groomed	Bathes and grooms self if reminded	Bathes self, but is groomed by staff	Must be bathed and groomed by staff

2. *Appearance and Dress*

Usually neat, wears own clothes	Usually neat, wears hospital attire	Disheveled, wears own clothing	Disheveled, wears hospital attire	Dress incomplete, or inappropriate

3. *Behavior At Meals*

Displays normal mealtime behavior	Manners good, but little socialization	Manners poor, but tries to socialize	Manners poor with no socialization	Is disruptive or messy problem eater

4. *Sleeping Habits*

Sleeps normally without sedation	Sleeps normally with sedation	Restless, wakeful but remains quiet	Sleeps in unusual clothing, places or times	Restless, noisy, disturbs others

5. *Toilet Habits*

Displays normal toilet habits	Uses toilet but neglects handwashing, etc	Uses toilet; is messy or immodest	Uses inappropriate areas for toileting	Is usually untidy or incontinent

II. *Personal Responsibility*

1. *Clothing*

Washes and irons own clothes	Washes but does not iron clothes	Launders only with supervision	Clothing is laundered by others	Does not launder; wears hospital issue

2. *Medication*

Receives no regular medication	Is on self-medication	Is on self-medication supervised	Medication given by staff	Frequently refuses medication

3. *Money*

Handles own money well	Money allotment handled well	Handles poorly; spends foolishly	Purchases made by family or voucher	Has no money or does not use funds

4. *Personal Possessions*

Ind. takes good care of all belongings	Ind. takes good care of most belongings	Takes care of belongings only if reminded	Needs direct help in upkeep of belongings	Destroys or unnecessarily discards things

5. *Assignments*

Volunteers for assignments	Carries out assigned tasks	Carries out tasks only if reminded	Tasks must be supervised or controlled	Refuses or is incapable of carrying out tasks

III. *Social Competence*

1. *Self-Confidence*

Shows awareness of most capabilities	Shows awareness of some capabilities	Self-doubting; seeks much reassurance	Covers insecurity using defenses	Extremely insecure or self-derogating

2. *Social Behavior*

Behaves properly in social situations	Behaves properly with some exceptions	Behaves well only under supervision	Usually acts out inappropriately	Seems unaware of expectations; confused

3. *Social Interaction*

Is friendly toward most people	Pleasant on approach has few friends	Limits interaction to staff members	Is abusive, or rejecting of people	Has little spontaneous interaction

4. *Standards of Conduct*

Usually shows respect for self and others	Acts with respect for self and few others	Shows lack of respect for self only	Shows lack of respect for self & others	Does not seem to know right from wrong

5. *Participation in Activities*

Takes active part in most activities	Takes part in some selected activities	Participates only if urged	Is disruptive; attention span short	Refuses or is unable to take part

IV. Social Responsibility

1. Participation in Goal-Setting

Ind. make decisions, plans	Makes plans with consultation	Is indecisive, wants goals set by others	Voices unrealistic goals	Is unwilling or unable to set goals

2. Conformity to Norms

Conforms to most expectations	Conforms except in select areas	Conforms with frequent reminding	Actively resists conformity	Seems unaware of social expectations

3. Group Relatedness

Actively seeks to help others	Participation fair Helpful to others	Participates when directed	Self-centered; tries to avoid helping others	Detached, doesn't acknowledge others

4. Job Responsibility

Is dependable; job adjustment good	Usually dependable job adjustment fair	Sometimes unreliable; job adjustment poor	Works erratically; unable to hold jobs	Does not seek nor have employment

5. Financial Responsibility

Has bank account manages well	Has bank account, manages with help	Banking handled by family or sponsor	Money controlled by others	Is indigent or finances unknown

V. *Community Orientation*

1. *Use of Privileges*

Ind. uses city priv.	Uses downtown city priv. accompanied	Uses only immediate neighborhood	Restricts self to grounds	Does not go out of building on own initiative

2. *Shopping*

Ind. shops out of neighborhood	Ind. shops in neighborhood only	Is accompanied on shopping trips outside	Buys only at canteen or through other shoppers	Does not participate in shopping

3. *Transportation*

Ind. takes busses or taxis	Ind. takes taxi only	Travels by bus or by taxi accompanied	Relies on family or friends to transport	Does not travel into city

4. *Community Activities*

Ind. attends self-selected activities	Goes out informally with other people	Attends activities if initiated by family or friends	Attends planned activities with staff supervision	Does not attend outside activities

5. *Social Visits*

Ind. goes home temp. visit	Ind. makes day visits only	Goes on temp. visit if escorted by family/friends	Goes on day-visit if escorted by family/friends	Does not go out on visits

INSTRUCTIONS

This inventory contains five broad categories of evaluation in personal and social competence. These are subdivided into twenty-five specific areas designed to assess the degree to which the patient exhibits responsible, appropriate behavior. Before using this inventory, read the Guide which further defines each of these items.

Select one statement under each of the twenty-five items which best describes the patient at present. Place a check mark on the line indicated. Consider the patient's customary or characteristic functioning, rather than isolated incidents.

Please rate all items.

LEAVE BLANK

I. PERSONAL COMPETENCE ________________

II. PERSONAL RESPONSIBILITY________________

III. SOCIAL COMPETENCE________________

IV. SOCIAL RESPONSIBILITY________________

V. COMMUNITY ORIENTATION________________

TOTAL PSC SCORE ________________

GUIDE FOR USING PATIENT COMPETENCE INVENTORY

I. PERSONAL COMPETENCE

1. *Hygiene and Grooming*

Keeps skin clean, bathes frequently, brushes teeth regularly, make-up appropriate, clean-shaven or beard trim, nails clean, hair neat and clean.

2. *Appearance and Dress*

Dresses completely including underwear; clothing clean and unwrinkled, buttons intact, clothing appropriate to place and season; stockings neat, shoes clean, clothes in good repair, fit properly.

3. *Behavior at Meals*

Uses tableware correctly, has good table manners; chats with table companions, leaves table clean, returns tray properly; is appropriately dressed for dining room.

4. *Sleeping Habits*

Sleeps during appropriate hours, sleeps throughout the night in own bed; sleep-wear appropriate; uses bed linen; is considerate of others when retiring or arising, bed is uncluttered.

5. *Toilet Habits*

Closes bathroom door, attentive to modesty; uses toilet appropriately, uses tissue; leaves area clean; washes hands after using toilet, leaves basin clean, uses waste-receptacles.

II. PERSONAL RESPONSIBILITY

1. *Clothing*

Regularly keeps clothing laundered and pressed; uses equipment; clothes ironed or pressed neatly, arranges for dry-cleaning.

2. *Medication*

Takes medication according to direction, keeps medication safely, reports errors or loss; obtains prescriptions on time, takes only drugs that are prescribed.

3. *Money*

Plans ahead for expenditures, seldom loans or borrows from others; uses purse or wallet, carries only a reasonable amount, safeguards larger amounts, spends wisely.

II. PERSONAL RESPONSIBILITY (CONTINUED)

4. *Personal Possessions*

Keeps belongings clean and in good condition, stores properly, puts away when not in use, separates soiled from clean items; replaces buttons or fasteners as needed; uses appropriate cleansing agents.

5. *Assignments*

Volunteers to undertake assignments or proceeds to help others; arranges for substitute when absent; completes tasks satisfactorily; performs with a willing attitude.

III. SOCIAL COMPETENCE

1. *Self-Confidence*

Evaluates own talents or abilities realistically, is able to accept constructive criticism, asserts self when indicated, identifies areas of own progress.

2. *Social Behavior*

Adjusts behavior according to the setting such as being noisy and rowdy at a ballgame but quiet and attentive in church: is mannerly; conversational content, tone of voice, body movements, physical gestures are in keeping with given activity; controls impulses.

3. *Social Interaction*

Relates well with other patients and staff; readily approaches others for conversation or games, responds pleasantly on approach, shows interest in others' activities.

4. *Standards of Conduct*

Is honest and trustworthy; is protective of the person and property of self and others; remains uninvolved in problems of alcohol or drug abuse, bodily abuse, sexuality, theft or physical violence.

5. *Participation in Activities*

Willingly participates in scheduled and spontaneous activities, sometimes initiates activities, renders assistance when needed, acknowledges importance of program.

IV. SOCIAL RESPONSIBILITY

1. Participation in Goal-Setting

Makes immediate and long-range plans using good judgment. Discusses goals with group. Plans may include: schooling, job-training, job-seeking, or placement; leaving the hospital, outside living arrangements or other aspects of community return.

2. Conformity to Norms

Abides by the policies, practices and rules governing the group as well as customary adult behavior in the community. These include: etiquette, appropriate language, self-control, cooperation, and consideration for others; fulfilling moral obligations and accepting responsibility.

3. Group Relatedness

Accepts the role of group-member in a living situation, shows active interest by listening and contributing, shows concern for others, is helpful toward others with reference to living arrangements, accepts group decisions, supports group goals, shares information.

4. Job Responsibility

Has a job for which pay is received on or off grounds. Attendance and punctuality are good. Notifies employer of expected absence, expresses satisfaction with work, job changes are planned toward progression.

5. Financial Responsibility

Maintains a savings and/or checking account in a community banking facility; makes own deposits or withdrawals, keeps own records, keeps check-writing within balance.

V. COMMUNITY ORIENTATION

1. Use of Privileges

Is aware of and uses privileges both on and off grounds, initiates activities requiring the use of privileges, seeks further privileges if not complete and stays within expectations of responsibility accompanying privileges, uses appropriate channels when use or non-use or privileges requires a decision by the group, plans the use of privileges around the treatment program.

2. Shopping

Keeps self supplied with personal belongings through independent shopping, utilizes areas both in and out of the immediate neighborhood, knows where to go for desired items, makes appropriate plans for a shopping trip including reasonable transportation and dress.

V. COMMUNITY ORIENTATION (CONTINUED)

3. *Transportation*

Seeks knowledge of how to get to areas for shopping, visiting, or pleasure trips; initiates travel independently on a bus or taxi, is aware of cost of transportation and how to pay, is able to travel alone, makes a reasonable selection of mode of travel.

4. *Community Activities*

Attempts to find out about and shows interest in community resources, independently selects functions of interest, makes own arrangements to attend activities.

5. *Social Visits*

Is able to remain overnight when visiting family or friends, initiates visits and seeks approval through the appropriate channels, makes own plans for visiting, can usually handle unexpected incidents which may occur while on visit, returns as scheduled or appropriately alters plans accordingly.

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Title: OBSERVED PATIENT BEHAVIOR RATING SCALE

Author: Barajas, Judy Doan Kerr

Variable: Observed patient behavior as it is evidenced by social competence, social interest, personal neatness, depression, and irritability is the variable under study.

Description:

Nature and Content: This is a 25-item, 5-point rating scale to be completed by health care personnel who have observed the patient's behavior for at least 2 days previous to the day of scale completion. The items cover five categories of behavior identified above under *Variable.*

There are five items within each category: an example for each category is as follows: social competence (COM)—has to be reminded what to do; social interest (INT)—pays attention when spoken to; personal neatness (NEA)—keeps his(her) clothes neat and clean; depression (DEP)—appetite is very poor; irritability (IRR)—gets angry and easily annoyed.

Items are scored on a 5-point, Likert-type scale; for 16 items the scale values are: 0 = never, 1 = sometimes, 2 = often, 3 = usually, 4 = always. For the remaining nine items, the values are reversed, i.e., 0 = always, 1 = usually, 2 = often, 3= sometimes, 4 = never. These items are indicated on the instrument by asterisks.

Administration and Scoring: No special provisions are necessary for completing the scale other than that the author suggests, as noted above, the raters be familiar with the instrument and have observed the patient's behavior for at least 2 days. Approximately 5 minutes are needed to complete the scale.

A category score and a total score are computed for each subject by summing responses.

Development:

Rationale: The evolving theoretical framework of sensory deprivation, also referred to as perceptual deprivation, sensory isolation, or depletion of sensory input, served as the underlying rationale for the instrument.

Source of Items: The items were based upon a review of the literature, an instrument used by Honigfeld and Klett (1965), and the professional experiences of the author.

Procedure for Development: The instrument used by Honigfeld and Klett (1965) was revised and shortened by the author. Following use of the shortened version of the instrument in a pilot study with four subjects, the author revised the instrument so that it could be completed by health care personnel through observation of the patient rather than by direct questioning of the patient. Items in each category were structured or chosen so as to avoid the possibility of a physical disability, such as arthritis, affecting the rating (Kerr, 1971).

Reliability and Validity: No information on reliability was provided.

The instrument has face validity.

Use in Research: The author developed and used the instrument in a master's thesis which investigated sensory deprivation in geriatric patients in a nursing home. Her study included 20 patients in a private urban nursing home; their ages ranged from 69 to 100 years of age.

Comments: This instrument is still in the early stages of psychometric development. Its reliability needs to be established, and further validity evidence should be obtained. The reverse scoring of some items is confusing and a potential source of error. However, the instrument itself is simple, straightforward, and easy to administer; interrater reliability should be high because of this.

References:

Honigfeld, Gilbert, and Klett, James. The nurses' observation scale for inpatient evaluation. *Journal of Clinical Psychology*, 1965, *30* (1), 65–71.

Kerr, Judy Doan. *Sensory deprivation in geriatric patients in a nursing home.* Unpublished master's thesis, University of Arizona, 1971.

Source of Information:

Judy Doan Barajas
P.O. Box 82
Sanders, Ariz. 86512

Instrument Copyright: None.

Barajas, Judy Doan Kerr

OBSERVED PATIENT BEHAVIOR RATING SCALE

Directions: Base your ratings on the patient's observed behavior during the last three days only, including today. For each item decide to what extent it describes the patient's observed behavior and then indicate your choice by circling the appropriate number before the item.

0 = never, 1 = sometimes, 2 = often, 3 = usually, 4 = always

Score					
0	1	2	3	4	* Is hesitant and uncertain in making up his mind. (COM)
0	1	2	3	4	Pays attention when spoken to. (INT)
0	1	2	3	4	Laughs or smiles at funny comments or events. (INT)
0	1	2	3	4	Makes certain his hair is combed. (NEA)
0	1	2	3	4	Cries. (DEP)
0	1	2	3	4	Is irritable and grouchy. (IRR)
0	1	2	3	4	* Appetite is very good. (DEP)
0	1	2	3	4	* Has to be reminded what to do. (COM)
0	1	2	3	4	Initiates conversation. (INT)
0	1	2	3	4	Keeps himself neat and clean. (NEA)
0	1	2	3	4	* Is messy in his eating habits. (NEA)
0	1	2	3	4	Says he feels blue or depressed. (DEP)
0	1	2	3	4	Complains about the food and care. (IRR)
0	1	2	3	4	Talks about happenings on the ward. (INT)
0	1	2	3	4	* Needs help in dressing for reasons other than a physical disability, such as arthritis. (COM)
0	1	2	3	4	* Ignores the activities around him. (INT)
0	1	2	3	4	* Wets or soils his clothes or bedding. (COM)
0	1	2	3	4	Becomes easily upset if something does not suit him. (IRR)
0	1	2	3	4	Shouts and yells. (IRR)
0	1	2	3	4	Says that he is no good. (DEP)
0	1	2	3	4	Keeps his clothes neat and clean. (NEA)
0	1	2	3	4	* Needs help in washing for reasons other than a physical disability, such as arthritis. (COM)
0	1	2	3	4	* Is sloppily dressed. (NEA)
0	1	2	3	4	Accuses others of wanting to hurt him. (DEP)
0	1	2	3	4	Gets angry or annoyed easily. (IRR)

Social Competence (COM) _____
Social Interest (INT) _____
Personal Neatness (NEA) _____
Total _____

Depression (DEP) _____
Irritability (IRR) _____
Total _____

Title: FUNCTIONING STATUS ASSESSMENT FORM (This is one section of the Patient Assessment Form referenced below.)

Authors: Densen, Paul M., Danehy, Lester, Flagle, Charles D., and Katz, Sidney

Variables: An individual's ability to move about physically, to maintain his(her) body by bathing, dressing, ingesting food, eliminating waste, and by carrying out the basic social functions of communicating and behaving in a manner appropriate to the environment are the variables addressed by this instrument (Jones et al., 1973).

Description:

Nature and Content: This is a 14-item, observer-completed instrument. The instrument items address a patient's level of mobility, walking, bathing, dressing, toileting, bowel function, bladder function, wheeling, transferring, stairclimbing, eating/feeding, behavior pattern, communication of needs, and orientation (time, place, and person). The first 11 items assess the patient according to the degree of dependency in functioning, e.g., independent; needs the help of one or more persons; needs the help of special equipment, mechanical aids, or devices, etc. Two items address the patient's ability to behave and communicate in a manner appropriate to his(her) environment. One item assesses the patient's orientation to time, place, and person.

Administration and Scoring: It is essential that this instrument be completed by someone in a position to observe the patient daily. The definitions of items should be followed carefully. Where functioning over the 24 hours is at issue, the observation of staff on duty at night, as well as those on duty during the day and evening shift, should be taken into account. Detailed definitions and instructions for completing the form are provided in the User's Manual (Jones et al., 1973), and along with an example of a completed instrument, the following additional instructions are provided in the Addendum (Jones et al., 1975):

> Record the patient's usual activity during the 2 weeks prior to the date of assessment. Usual is defined as "more often than not."
>
> Record what the patient actually does, not what he(she) might be capable of doing nor what he(she) "should" be doing.
>
> Record the patient's usual activities as he(she) performs them in his(her) usual setting rather than in a therapeutic session, e.g., on the unit rather than in the physical therapy department.
>
> (The standard cane is not considered a mechanical aid.)

The instrument was not developed to be scored per se; however, a scoring system could be developed.

Development:

Rationale: The original Patient Classification for Long-Term Care (Jones et al., 1973) resulted from a collaborative effort of four research groups whose purpose was to improve the care of long-term patients by systematizing the data upon which health care providers and planners make decisions. Assessments based on that classification, which were carried out in a federally funded research project in seven nursing homes in Massachusetts, pointed to the need for additional information directly relevant to patient care. Recognition of that need, and of the need for a form that would provide a continuing patient status record and organize information in a way which would facilitate communication of that information, resulted in the 1975 revision of the form, termed the Patient Assessment Form. The Functioning Status Assessment Form is a part of that form.

Source of Items: The items were based upon the aforementioned Patient Classification for Long-Term Care and the experience of members of the Harvard Center for Community Health and Medical Care in using that classification.

Procedure for Development: Using the Patient Classification for Long-Term Care as a foundation, some of the items were revised, and others which would enhance its usefulness in nursing home programs were developed and tested. Those items which proved to add value to the original foundation were incorporated, and the Patient Assessment Form resulted.

Reliability and Validity: Studies to determine the total instrument's reliability are in progress. Content validity was established by having used the experience of recognized experts in the field as a major source for items and the procedures used to develop the instrument.

Use in Research: The Patient Assessment Form has been used in a national survey of 288 skilled nursing facilities and is currently being used in research conducted by the Harvard Center for Community Health and Medical Care.

Comments: The Patient Assessment Form provides descriptive data relative to long-term patients in nursing homes. However, the Functioning Status Assessment portion is applicable to other types of patients in other settings and readily lends itself to quantification. The data coding system, developed for the Patient Classification for Long-Term Care study and described in the User's Manual (Jones et al., 1973) referenced below, could be modified and used for scoring the Functioning Status Assessment Form.

Anyone planning to use this tool should first evaluate all available psychometric data.

References:

Falcone, A. R., and Bright, S. M. *Patient assessment: A training manual for use of patient classification in long-term care.* Division of Long-Term Care, Office of the Administrator, Health Resources Administration, PHS and DHEW, June 1976.

Jones, Ellen W., McNitt, Barbara J., and McKnight, Eleanore M. *Patient classification for long-term care: User's manual.* DHEW, Public Health Service, Health Resources Administration, Bureau of Health Services Research and Evaluation, DHEW publication No. (HRA) 74-3107 and 75-3107, Washington, D.C., 1973.

______. Addendum: Instructions for completing patient assessment form (July 1975 Revision). Boston: Harvard Center for Community Health and Medical Care, 1975.

Office of Nursing Home Affairs, Public Health Service, U.S. Department of Health, Education, and Welfare. *Long-term care facility improvement study.* Survey of 288 skilled nursing facilities, Introductory Report, July 1975.

Source of Information:

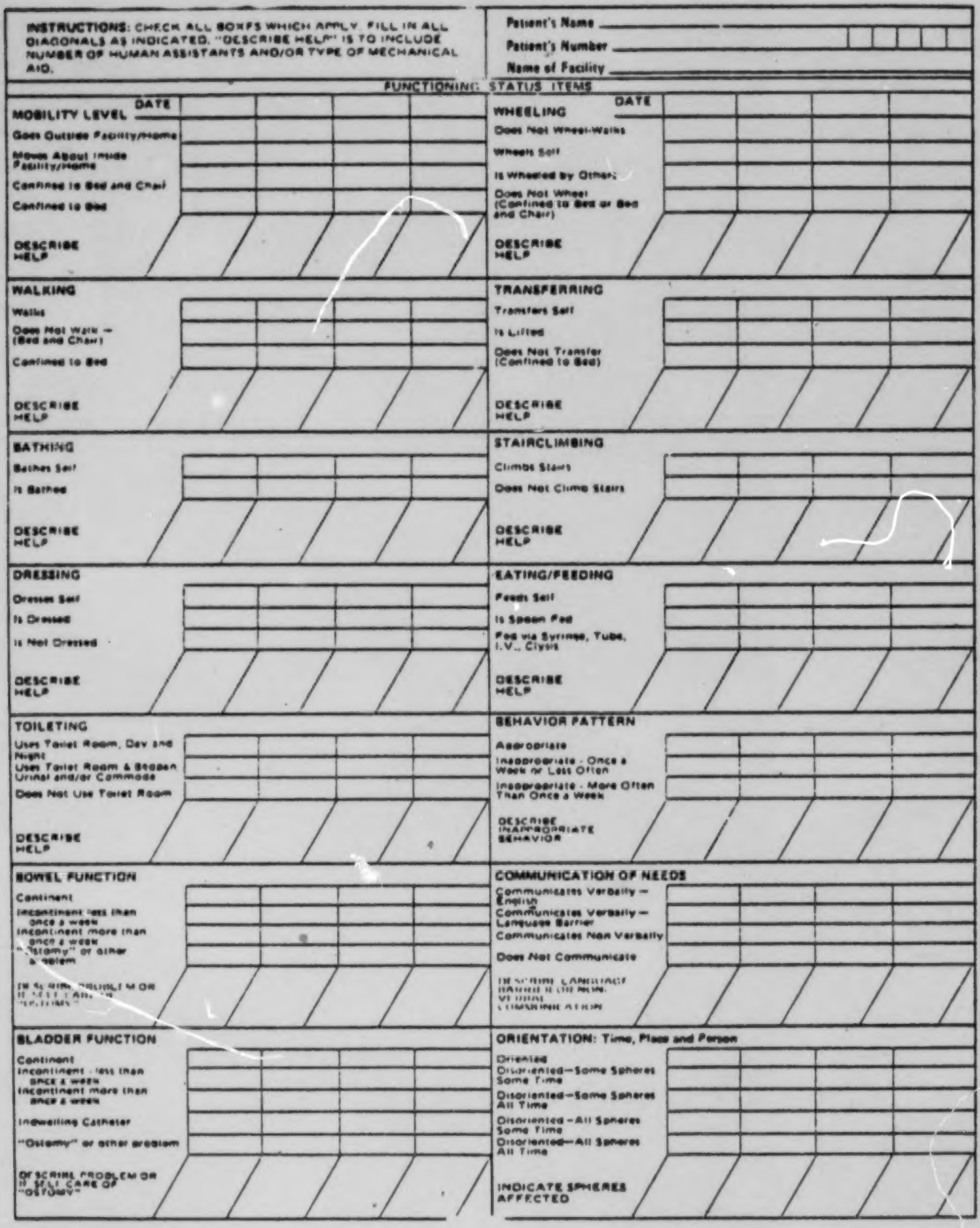
Ellen W. Jones, Assistant Director
Harvard Center for Community Health and Medical Care
Boston, Mass. 02115

American Health Care Association
1200 Fifteenth Street
Washington, D.C. 20005

Instrument Copyright: None.

Densen, Paul M., Danehy, Lester, Flagle, Charles D., and Katz, Sidney

FUNCTIONING STATUS ASSESSMENT FORM



INSTRUCTIONS: CHECK ALL BOXES WHICH APPLY. FILL IN ALL DIAGONALS AS INDICATED. "DESCRIBE HELP" IS TO INCLUDE NUMBER OF HUMAN ASSISTANTS AND/OR TYPE OF MECHANICAL AID.

Patient's Name ______________

Patient's Number ______________ ☐☐☐☐☐

Name of Facility ______________

FUNCTIONING STATUS ITEMS

MOBILITY LEVEL	DATE			
Goes Outside Facility/Home				
Moves About Inside Facility/Home				
Confined to Bed and Chair				
Confined to Bed				
DESCRIBE HELP				

WALKING				
Walks				
Does Not Walk — (Bed and Chair)				
Confined to Bed				
DESCRIBE HELP				

BATHING				
Bathes Self				
Is Bathed				
DESCRIBE HELP				

DRESSING				
Dresses Self				
Is Dressed				
Is Not Dressed				
DESCRIBE HELP				

TOILETING				
Uses Toilet Room, Day and Night				
Uses Toilet Room & Bedpan Urinal and/or Commode				
Does Not Use Toilet Room				
DESCRIBE HELP				

BOWEL FUNCTION				
Continent				
Incontinent less than once a week				
Incontinent more than once a week				
"Ostomy" or other problem				
DESCRIBE PROBLEM OR IF SELF CARE OF "OSTOMY"				

BLADDER FUNCTION				
Continent				
Incontinent - less than once a week				
Incontinent more than once a week				
Indwelling Catheter				
"Ostomy" or other problem				
DESCRIBE PROBLEM OR IF SELF CARE OF "OSTOMY"				

WHEELING	DATE			
Does Not Wheel-Walks				
Wheels Self				
Is Wheeled by Others				
Does Not Wheel (Confined to Bed or Bed and Chair)				
DESCRIBE HELP				

TRANSFERRING				
Transfers Self				
Is Lifted				
Does Not Transfer (Confined to Bed)				
DESCRIBE HELP				

STAIRCLIMBING				
Climbs Stairs				
Does Not Climb Stairs				
DESCRIBE HELP				

EATING/FEEDING				
Feeds Self				
Is Spoon Fed				
Fed via Syringe, Tube, I.V., Clysis				
DESCRIBE HELP				

BEHAVIOR PATTERN				
Appropriate				
Inappropriate - Once a Week or Less Often				
Inappropriate - More Often Than Once a Week				
DESCRIBE INAPPROPRIATE BEHAVIOR				

COMMUNICATION OF NEEDS				
Communicates Verbally — English				
Communicates Verbally — Language Barrier				
Communicates Non Verbally				
Does Not Communicate				
DESCRIBE LANGUAGE BARRIER OR NON-VERBAL COMMUNICATION				

ORIENTATION: Time, Place and Person				
Oriented				
Disoriented—Some Spheres Some Time				
Disoriented—Some Spheres All Time				
Disoriented—All Spheres Some Time				
Disoriented—All Spheres All Time				
INDICATE SPHERES AFFECTED				

Title: SICKNESS IMPACT PROFILE (SIP)

Authors: Gilson, Betty S., Gilson, John S., Bergner, Marilyn, Bobbitt, Ruth A., Kressel, Shirley, Pollard, William E., and Vesselago, Michael

Variables: The instrument measures the impact of sickness in terms of dysfunction in behavior and/or performance of daily activities as perceived by the respondent.

Description:

Nature and Content: The Sickness Impact Profile (SIP) is a self-administered or interviewer-administered scaled measure containing 189 items grouped into 14 categories: social interaction; ambulation or locomotion activity; sleep and rest activity; taking nutrition; usual daily work; household management; mobility and confinement; movement of the body; communication activity; leisure pastimes and recreation; intellectual functioning; interaction with family members; emotions, feelings, and sensations; and personal hygiene.

The subject responds to those items in each of the 14 categories which he(she) believes accurately describe his(her) behavior at a given time.

Administration and Scoring: If the SIP is self-administered, the subject must be able to read and comprehend English at the 8th grade level and must be physically able to mark the chosen answers. The instrument requires approximately 35 to 40 minutes to complete.

If the SIP is administered by interview, the interviewer must be familiar with the instrument and trained in its use.

Scores are computed for each of the 14 SIP categories and for the overall instrument. The scores are computed by use of the following formula:

$$\frac{\text{Sum of scale values of items checked in a category or entire instrument}}{\text{Sum of scale values of \textit{all} items in a category or entire instrument}} \times 100$$

Overall SIP scores have ranged from 0 percent to approximately 70 percent.

Development:

Rationale: A major goal of the research being conducted on the SIP is the development of a measure of health status which could be used as an outcome measure in the evaluation of health care (Pollard et al., 1976).

Source of Items: The aim of instrument construction was to incorporate both professional and lay perspectives into the content of the Sickness Impact Profile. Over 1,000 statements which describe behavioral dysfunction were obtained from patients, health care professionals, individuals caring for patients, and the apparently healthy. In addition, function assessment instruments that have been designed for the evaluation of circumscribed patient groups were reviewed for statements of behavioral dysfunction.

Procedure for Development: From the sources identified in the preceding section, 1,250 specific statements of behavioral change were obtained. These statements were combined and condensed to yield 312 unique statements or items which were classified into 14 categories, each representing one area of living or type of activity. The individual items were originally scaled, based upon the judgments of 25 judges (7 graduate nursing students, 8 medical students, 6 health services administration students, and 4 physicians). A protocol scaling procedure was employed to validate the construct of dysfunction and to determine the extent to which SIP scores relate to a more global assessment of dysfunction. As a further validation of the original scale values, a rescaling by 108 consumer judges was performed. Current scale values reflect data obtained from both judging groups.

Three field trials have been conducted to study the feasibility, reliability, and validity of the SIP. Approximately 1,100 subjects in various states of health have completed SIPs. Following each field trial, an item analysis and instrument revision were performed. The third revision, now in process, will produce a final form of the SIP.

Reliability and Validity: The collection of test-retest reliability data was carried out in conjunction with the collection of data for validation, item analysis and feasibility assessment purposes.

As part of the second field trial, the SIP was administered twice to 119 subjects. Each retest was conducted within 24 hours of the initial administration to minimize the effects of change in the subjects' conditions on their responses. SIP test-retest reliability in terms of overall scores obtained on the two administrations for the total sample was high ($r = 0.88$, $p < 0.001$). Test-retest reliability correlations for scores with the 14 categories ranged from $r = 0.62$ (household management) to $r = 0.90$ (personal hygiene). Reliability tests conducted during the third field trial produced comparable results.

To assess the validity of the SIP, three groups of criteria were used: those based on the subject's self-assessment of health status, those based on the clinician's assessment of the subject's health status, and those based on the subject's score on another function assessment instrument (Bergner et al., 1976a). In general, self-assessments of sickness and dysfunction were highly related to SIP overall scores ($r = 0.54$ and $r = 0.52$ respectively). For outpatients with chronic problems, the correlation between self-assessment of dysfunction and clinician assessment of dysfunction was $r = 0.52$. The correlation between the rank classification obtained on the Katz's Activities of Daily Living (ADL) and SIP overall scores was moderately high ($r = 0.46$). Validation of the SIP is treated in detail in Bergner et al., 1976a). Similar validation studies based on the third field trial are forthcoming.

Use in Research: A detailed report on the construction of the SIP at the University of Washington is contained in Gilson et al. (1975). The article also contains a report on the first pilot study which provided preliminary data. Bergner et al. (1976 b), Pollard et al. (1976), and Martin et al. (1976) report on the results of the second field trial. Bergner et al. (1976b) discuss the conceptual and methodological development of the SIP. A detailed report on scaling methodology has been accepted for publication (Carter et al., 1976).

Comments: The items constituting the SIP were sifted from a large original pool of dysfunction items, and they provide a comprehensive inventory of sickness impact indicators.

The instrument can be used with subjects who have not sought medical care and for whom the investigator has no background of clinical information or data. This makes the instrument particularly applicable to large populations and makes it potentially useful in assessing health care outcomes on a large scale.

Because of its length, the instrument is not reproduced in this compilation.

References:

Bergner, Marilyn, Bobbitt, Ruth A., Pollard, William E., Martin, Diane P., and Gilson, Betty S. The sickness impact profile: Validation of a health care measure. *Medical Care*, January 1976a, *14* (1), 57–67.

———. The sickness impact profile. Conceptual formulation and methodology for the development of a health status measure. *International Journal of Health Services*, 1976b, *6* (3), 393–415.

Brook, R. H., and Appel, F. Quality of care assessment: Choosing a method for peer review. *NEJM*, 1973, *288*, 1323–1329.

Carter, William B., Bobbitt, Ruth A., Bergner, Marilyn, and Gilson, Betty S. The sickness impact profile: Issues and methods in validation of an interval scaling. Accepted for publication, *Health Services Research*, 1976.

Donabedian, A. Evaluating the quality of medical care. *Milbank Memorial Fund Quarterly*, 1966, *44*, 166–206.

Gilson, Betty S., Gilson, John S., Bergner, Marilyn, Bobbitt, Ruth A., Kressel, Shirley, Pollard, William E., and Vesselago, Michael. The sickness impact profile: Development of an outcome measure of health care. *American Journal of Public Health*, 1975, *65* (12), 1304–1309.

Martin, Diane P., Gilson, Betty S., Bergner, Marilyn, Bobbitt, Ruth A., Pollard, William E., Morris, Joan, and Cole, William M. The sickness impact profile: Potential use of a health status instrument for physician-training and assessment of outcomes. *Journal of Medical Education*, November 1976, *51*, 942–944.

Pollard, William E., Bobbitt, Ruth A., Martin, Diane P., and Gilson, Betty S. The sickness impact profile: Reliability of a health status measure. *Medical Care*, February 1976, *14* (2), 146–155.

Source of Information:

Sickness Impact Profile Project
Department of Health Services JD–40
School of Public Health and Community Medicine
University of Washington
Seattle, Wash. 98195

Instrument Copyright: None.

Title: HEALTH NEEDS OF THE ELDERLY

Authors: Hain, Mary Jeanne, and Chen, Shu Pi

Variable: Health needs of the elderly living in high-rise apartments is the variable study. Health needs include any factor which, if lacking, impinges on the psychosocial or physiological well-being of the elderly and are defined in relation to the elderly person's being well or not well and whether or not the elderly person has access to medical care. Elderly is defined as "anyone over 65 years of age" (Hain, 1974).

Description:

Nature and Content: This is a multi-item interview schedule which elicits demographic data and data pertaining to "health needs" which have been operationalized as follows: (1) Health condition includes the number of days of illness, status of ambulation, and/or difficulty with symptoms during the month prior to interview. (2) Physical functioning includes the capacity to perform five defined activities of daily living during the month prior to interview (i.e., getting about in apartment, doing own laundry, getting around outside apartment complex, washing, bathing, dressing, putting on shoes, and cutting toenails). (3) Accessibility of medical care covers the availability of medical services in emergency and nonemergency situations, as well as routine health care.

Administration and Scoring: The instrument was developed to be administered by interview, and answer spaces have been coded for computer analysis. The instrument per se was not scored. Methods of scoring and data analysis will depend upon the needs and purposes of the researcher.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: Two items were adopted directly from the DuPage County Health Department Survey (Managan et al., 1974), 6 items were adapted from that survey and revised by the author, and 12 items were constructed by the author based upon her professional experience and a review of the literature (Hain, 1974).

Procedure for Development: The author interviewed two Chicago residents over 65 years of age to test the wording of the instrument.

Reliability and Validity: No reliability information was provided other than the author's statement, "Because of the experience from the DuPage survey, the reliability of this study instrument, although not statistically established, was assumed" (Hain, 1974).

Face validity was established by deriving the items from the sources identified above.

Use in Research: Hain (1974) developed and used the instrument for her master's thesis referenced below. Her sample included elderly residents of two high-rise apartments in Erie, Pennsylvania.

Comments: The questionnaire includes detailed instructions to the interviewer that can be adapted to the individual user's needs. The legibility and simplicity of the questionnaire format indicates considerable planning on the part of its developer. As it now stands, the instrument lends itself only to descriptive data. However, it could be developed into an instrument that would yield quantifiable data.

Future work should include refining some of the wording and the format of the instrument. For example, question number 2 assumes only one other person living with the respondent, question number 5 has no provision for "don't know." The instrument's reliability and validity should be more systematically assessed.

References:

Hain, Sr. Mary Jeanne. *Health needs of elderly in two high-rises in Erie, Pennsylvania.* Unpublished master's thesis, University of Illinois, Chicago, 1974.

Managan, D., Wood, J., Heinichen, C., Hoffman, M., Hess, G., and Gillings, D. Older adults: A community survey of health needs. *Nursing Research*, 1974, *23*, 426–432.

Source of Information:

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Instrument Copyright:

The American Journal of Nursing Company
10 Columbus Circle
New York, N.Y. 10019

Hain, Mary Jeanne, and Chen, Shu Pi

HEALTH NEEDS OF THE ELDERLY

Introduction

Would you mind answering a few questions? I have them all ready in the form of a questionnaire. I shall read the questions to you and then fill in your answers. This material will be kept confidential.

Name of elder person ____________________

I.D.# ____________________

Address ____________________

Telephone no. ____________________ sex _____ 1. male

_____ 2. female

Interview date ____________________

Age as of last birthday _______ _______

1. Is the elder member able to answer the questionnaire?

_____1. yes _____2. no

1.a. Reason for elder member's inability to answer:

_____1. too infirm

_____2. mentally confused

_____3. not at home

_____4. ____________________

_____5. ____________________

_____9. does not apply

2. If not living alone, would you tell me the age and relationship of the person living with you?

age _____ _____ relationship ____________________________

3. During the last month, how many days were you sick to the point of having to give up some of your regular activities like visiting, going shopping, or cooking for yourself?

_____1. no days
_____2. 1-7 days
_____3. 8-14 days
_____4. 15-21 days
_____5. 22 days or more
_____6. ________________

4. During the last month, for the most part, were you up and around at home, stay in a chair, at home but in bed, completely bedridden at home, visiting at the home of a friend or relative, or in a hospital or nursing home?

_____1. up and around at home
_____2. visiting at home of friend or relative
_____3. stay in chair
_____4. at home but in bed
_____5. completely bedridden at home
_____6. at hospital or nursing home
_____7. other

4a. If ill during the last month, did you see a doctor?

_____1. yes
_____2. no, without explanation
_____3. no, fear and/or mistrust of doctors, hospitals
_____4. no, insufficient knowledge of medical resources
_____5. no, insufficient financial resources
_____6. no transportation
_____7. no need for medical attention
_____8. ____

4b. How far did you have to go to see your doctor?

_______________ miles

4c. What method of transportation did you use to see your doctor when you were ill?

_____1. drive yourself
_____2. member of family drives
_____3. friend drives
_____4. taxi-cab
_____5. bus
_____6. you walked
_____7. other ______________________
_____9. does not apply

4d. Do you have insurance to cover part of the cost of the doctor's visit?

_____1. yes _____2. no

How much did the visit cost you? $ __________

5. Regardless if you were sick last month or not, do you go to a doctor on a regular basis?

_____1. yes, explain ____

_____2. no, explain ____

5a. How far do you have to go for your check-up?

_______________miles

5b. What method of transportation do you use to keep your doctor's appointments?

_____1. drive yourself
_____2. member of family drives
_____3. friend drives
_____4. taxi-cab
_____5. bus
_____6. you walk
_____7. other ______________________________
_____9. does not apply

5c. Do you have insurance to cover your regular check-up?

_____1. no
_____2. yes If yes, what is the source of the third party payment? ____________________

What is the average cost per visit? $ _________ _______

6. In the event of a sudden illness, what do you do?

_____1. call your own doctor
_____2. go to an E.R.
_____3. call a relative
_____4. call the management
_____5. call the inhalator squad
_____6. other ______________________________

7. In general, how far do you have to go to get your prescription filled?

________________ miles

7a. In general, what method of transportation do you use to get your prescriptions?

_____1. drive yourself
_____2. member of family drives
_____3. friend drives
_____4. taxi-cab
_____5. bus
_____6. you walk
_____7. home delivery
_____8. other ______________________________

7b. During the last year, how much did medications cost you on a monthly basis?

$ _________

8. During the last month, have you had any difficulty with the following symptoms? If yes, did you seek medical attention? Please explain.

symptom	difficulty yes	difficulty no	medical advice yes	medical advice no	comment
1. trouble breathing	___	___	___	___	________
2. pains in chest	___	___	___	___	________
3. swelling of ankles or feet	___	___	___	___	________
4. pains in joints or muscles	___	___	___	___	________
5. frequency of urination	___	___	___	___	________
6. dizzy spells	___	___	___	___	________
7. sores that do not heal	___	___	___	___	________
8. trouble hearing	___	___	___	___	________
9. trouble seeing	___	___	___	___	________
10. other ________					

9. I am going to read a list of activities that many people have difficulty with as they grow older. After I read each one, please tell me if you have no difficulty, some difficulty with, or whether you cannot do it at all.

	no diff. (0)	some (1)	cannot (2)
1. getting about in the apartment	___	___	___
2. doing own laundry	___	___	___
3. washing, bathing, dressing, putting on own shoes	___	___	___
4. getting around outside apartment complex	___	___	___
5. cutting your own toenails	___	___	___

10. Is there anything you feel is a problem or a need in your way of life today?

____

____

Notes:

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Title: PULSES PROFILE

Author: Moskowitz, Eugene

Variable: Functional capacity, as determined by general physical condition (P), upper extremity functioning (U), lower extremity functioning (L), sensory function (S), excretory functions (E), and mental and emotional status (S), are assessed by this instrument.

Description:

Nature and Content: The PULSES Profile is a method by which to assess the functional capacity of an individual much like the Apgar Score is used to assess a newborn. The areas of assessment are as follows:

P physical condition including diseases of the viscera (cardiovascular, pulmonary, gastrointestinal, urologic, and endocrine) and cerebral disorders which are not enumerated in the lettered categories which follow
U upper extremities including shoulder girdle, cervical and upper dorsal spine
L lower extremities including the pelvis, lower dorsal, and lumbosacral spine
S sensory components relating to speech, vision, and hearing
E excretory functions, i.e., bowel and bladder control
S mental and emotional status.

Each area of assessment is rated 1, 2, 3, or 4 by following the guidelines on the PULSES worksheet.

Administration and Scoring: For the most effective use of the profile, the patient should have had a complete and thorough medical examination, and the person completing the profile should have access to all pertinent patient health care and social data. Following the worksheet guidelines and using data available from all sources including observation, the investigator completes the form by assigning a numerical value to each category of the profile (see instrument).

> The numerical values given to the various categories constitute the basis for the interpretation of the profile. . . . For instance:
>
> An 82-year-old man with mild diabetes not requiring strict dietary control or insulin, suffered a mild cerebrovascular accident on an arteriosclerotic basis, with a resultant right hemiparesis. He wears a brace and walks with difficulty. Aphasia is minimal. On occasion he is incontinent during the night and he has minimal cerebral changes.
>
> The profile would read as follows:
>
> P U L S E S
> 3 2 3 2 2 2
>
> The profile would be interpreted as follows: This is an individual who is ambulating with difficulty. He requires some medical supervision. He has fairly good use of his upper extremities; wets the bed occasionally and has minimal signs of mental deterioration not requiring close supervision and control. From the environmental point of view, we infer that he would need placement in an institution with accessible physical facilities, including bathroom and living quarters located on one floor, where he could also obtain his meals. (Moskowitz and McCann, 1957).

A film has been developed by the New York State Department of Health to introduce the PULSES Profile technique.

Development:

Rationale: The increasing number of chronically ill and aging persons has emphasized the need for an effective method of evaluating and classifying their functional capacity. Many approaches have been utilized. Dasco and his colleagues (Moskowitz and McCann, 1957) based functional evaluation on mobility; McBride (1948) set up rigid performance tests based upon various occupational pursuits. The PULSES Profile is an attempt to reconcile the various performance criteria (Moskowitz and McCann, 1957).

Source of Items: The PULSES Profile is based upon the Pulhems Profile method of rating functional capacity developed by the Canadian Army and subsequently adopted by the U.S. Army during World War II.

Procedure for Development: Using the Pulhems Profile as a point of departure, the specifications for the categories were changed and an additional category, bowel and bladder continence, was added in order to apply the system to the chronically ill, disabled, and aged. The numerical grades of the Pulhems Profile were maintained.

Reliability and Validity: No information concerning the reliability of the instrument was provided. The instrument has face validity.

Use in Research: The profile has been used extensively by Moskowitz in his work with chronically ill and disabled persons in New York State.

Comments: As the author states, "Disability evaluation, properly geared to the selected group, is necessary to supplement the medical diagnosis" (Moskowitz and McCann, 1957).

The PULSES Profile provides a concise summary of data available from several sources. It would appear to be useful in establishing a baseline picture of a patient's condition, assessing nursing care requirements, setting rehabilitation goals, and evaluating progress toward those goals, or conversely, documenting further physical or mental deterioration. Psychometric attention is needed prior to further use.

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Moskowitz, Eugene

PULSES PROFILE

P. Physical condition including diseases of the viscera (cardiovascular, pulmonary, gastrointestinal, urologic, and endocrine) and cerebral disorders which are not enumerated in the lettered categories below.

1. No gross abnormalities considering the age of the individual.
2. Minor abnormalities not requiring frequent medical or nursing supervision.
3. Moderately severe abnormalities requiring frequent medical or nursing supervision yet still permitting ambulation.
4. Severe abnormalities requiring constant medical or nursing supervision confining individual to bed or wheelchair.

U. Upper extremities including shoulder girdle, cervical and upper dorsal spine.

1. No gross abnormalities considering the age of the individual.
2. Minor abnormalities with fairly good range of motion and function.
3. Moderately severe abnormalities but permitting the performance of daily needs to a limited extent.
4. Severe abnormalities requiring constant nursing care.

L. Lower extremities including the pelvis, lower dorsal and lumbosacral spine.

1. No gross abnormalities considering the age of the individual.
2. Minor abnormalities with fairly good range of motion and funciton.
3. Moderately severe abnormalities permitting limited ambulation.
4. Severe abnormalities confining the individual to bed or wheelchair.

S. Sensory components relating to speech, vision, and hearing.

1. No gross abnormalities considering the age of the individual.
2. Minor deviations insufficient to cause any appreciable functional impairment.
3. Moderate deviations sufficient to cause appreciable function impairment.
4. Severe deviations causing complete loss of hearing, vision, or speech.

E. Excretory function, that is, bowel and bladder control.

1. Complete control.
2. Occasional stress incontinence or nocturia.
3. Periodic bowel and bladder incontinence or retention alternating with control.
4. Total incontinence, either bowel or bladder.

S. Mental and Emotional Status.

1. No deviations considering the age of the individual.
2. Minor deviations in mood, temperament and personality not impairing environmental adjustment.
3. Moderately severe variations requiring some supervision.
4. Severe variations requiring complete supervision.

PROFILE

P	U	L	S	E	S

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Title: GERIATRIC RATING SCALE (GRS)

Authors: Plutchik, Robert, Conte, Hope, Lieberman, M., Bakur, Marcella, Grossman, J. and Lehrman, N.

Variable: The level of physical and mental functioning of geriatric patients as it can be assessed by ratings of selected observable behavior is the variable.

Description:

Nature and Content: This is a 31-item, fully anchored rating scale. The items address behavioral characteristics which the authors considered as indicative of the level of physical and social functioning of geriatric patients. Each statement is followed by three possible response choices, and responses are to be indicated by circling the number which corresponds to the answer of choice. All items are rated in the same direction, i.e., a higher rating is indicative of a higher degree of impairment.

Administration and Scoring: The rating scale was designed to be administered on the patients' wards. It requires no special training on the part of the rater other than he(she) be well acquainted with the patient being rated. The patient need not be cooperative or present during the rating. Ratings are to be based on behavior observed only during the previous week.

A total score is obtained by summing the rating indicated for each item. Based upon the instrument itself, the range of total scores can be from 0 to 62. However, in Plutchik et al. (1970), it is reported that in their analysis of data, ratings of items 8, 10, and 11 were discarded because of the day shifts' difficulty in obtaining information on these items. Therefore, if these items are eliminated, total scores may range from 0 to 58. The higher the score, the greater the patient's impairment in functioning.

Development:

Rationale: No information regarding an underlying theoretical rationale was provided.

Source of Items: The items were based upon the professional experience with geriatric patients of a group of psychologists and psychiatrists and a review of existing rating scales. Three of the items were adopted from the Stockton Geriatric Rating Scale (Meer and Baker, 1966), and 19 of the items were adapted from the same source.

Procedure for Development: The authors decided that all items were to be brief, objective, and worded in simple language (Plutchik et al., 1970). To the items adopted and adapted from the Stockton Geriatric Rating Scale, the authors added nine new items.

Preliminary drafts were made and revised until there was consensus among the clinicians that the items had face validity and content validity for the population for which it was intended.

Reliability and Validity: The GRS was used to rate the behavior of patients on nine geriatric wards of the Bronx State Hospital. On six of the wards, two independent ratings for each patient were made by ward attendants. Dual ratings were made for 86 patients; the correlation between the ratings made by the two raters was 0.87.

Data were obtained on a total of 207 patients in the Bronx State Hospital. An item analysis was performed to determine which items discriminated best between patients functioning in a relatively integrated manner and those who were more impaired. For this purpose, scores of the 30 patients with the highest ratings were compared with scores of the 30 patients with the lowest ratings. Twenty-four of the items discriminated at the 0.05 level or higher; 20 of the items discriminated at the 0.001 level or higher.

Validity evidence was provided by a comparison of the rating scale scores of 50 hospitalized geriatric patients with those of 36 hospitalized nongeriatric patients, randomly drawn. When the mean scores for the two groups were compared, the difference was significant at the 0.001 level.

Six psychologists and psychiatrists from the geriatric wards at the Bronx State Hospital were asked, independently, to rate the above-mentioned nine wards on a 9-point scale in terms of the adequacy of the average functioning of the patients on these wards. Correlations were then run between the mean psychiatrists' ratings and the mean GRS scores for each ward. The correlation between the psychiatrists' ratings and the GRS scores was 0.86.

The same six psychologists and psychiatrists were asked to rank the wards on a 9-point scale on the basis of how adequate they believed the average functioning of the patients on each of the wards to be. The correlation between the wards' average GRS scores and the judged rank of the wards was 0.95.

Use in Research: The development and use of the GRS are described in the references cited below. The GRS has been recommended for research use by the Early Clinical Drug Evalua-

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tion Unit (ECDEU) of the Psychopharmacology Branch of National Institutes of Mental Health (Guy, 1976).

Comments: This instrument appears to be comprehensive, easy to administer, and to provide the information for which it was designed. The physical format of the instrument makes it easy to score, and norms have been computed by the authors. The simple direct language should make it usable by a variety of health care personnel with a variety of patients in a variety of health care settings. This tool has had a good deal of psychometric attention. However, any potential user must determine its reliability and validity for his(her) setting and population.

If more than one rater is involved, it will be important to establish interrater reliability, for some of the items require value judgments on the part of the rater, e.g., those items which have the words "often" and "sometimes" as rating choices.

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GERIATRIC RATING SCALE (GRS)

Instructions

On the following pages you will find a list of brief descriptions of behavior which are applicable to geriatric patients. Please read them carefully and indicate how much they apply to the patients you have been asked to rate. Base your answer on the patient's behavior during the past week only. Be sure to rate all items for each patient.

Name of Patient ____________________
His ward __________ Today's date __________
Your name ____________________
Your job title ____________________

	Circle *only* the number which applies		
1. When eating, the patient requires:			
No assistance (feeds himself)	0		
A little assistance (needs encouragement)		1	
Considerable assistance (spoon feeding, etc.)			2
2. The patient is incontinent:			
Never	0		
Sometimes (once or twice per week)		1	
Often (three times per week or more)			2
3. When bathing or dressing, the patient needs:			
No assistance	0		
Some assistance		1	
Maximum assistance			2
4. The patient will fall from his bed or chair unless protected by side rails:			
Never	0		
Sometimes		1	
Often			2
5. With regard to walking, the patient:			
Has no difficulty	0		
Needs assistance in walking		1	
Does not walk			2
6. The patient's vision, with or without glasses, is:			
Apparently normal	0		
Somewhat impaired		1	
Extremely poor			2
7. The patient's hearing is:			
Apparently normal	0		
Somewhat impaired		1	
Extremely poor			2
8. With regard to sleep, the patient:			
Sleeps most of the night	0		
Is sometimes awake		1	
Is often awake			2
9. During the day, the patient sleeps:			
Sometimes	0		
Often		1	
Most of the day			2
10. With regard to restless behavior at night, the patient is:			
Seldom restless	0		
Sometimes restless		1	
Often restless			2
11. The patient's behavior is worse at night than in the daytime:			
Never	0		
Sometimes		1	
Often			2
12. When not helped by other people, the patient's appearance is:			
Almost never sloppy	0		
Sometimes sloppy		1	
Almost always sloppy			2

	Circle *only* the number which applies		
13. The patient masturbates or exposes himself publicly:			
Never	0		
Sometimes		1	
Often			2
14. The patient is confused (unable to find his way around the ward, loses his possessions, etc.)			
Almost never	0		
Sometimes		1	
Often			[illegible]
15. The patient knows the names of:			
More than one member of the staff	0		
Only one member of the staff		1	
None of the staff			2
16. The patient communicates in any manner (by speaking, writing, or gestering) well enough to make himself easily understood:			
Almost always	0		
Sometimes		1	
Almost never			2
17. The patient reacts to his own name:			
Almost always	0		
Sometimes		1	
Almost never			2
18. The patient plays games, has hobbies, etc.:			
Often	0		
Sometimes		1	
Almost never			2
19. The patient reads books or magazines on the ward:			
Often	0		
Sometimes		1	
Almost never			2
20. The patient will begin conversations with others:			
Often	0		
Sometimes		1	
Almost never			2
21. The patient is willing to do things asked of him:			
Often	0		
Sometimes		1	
Almost never			2
22. The patient helps with chores on the ward:			
Often	0		
Sometimes		1	
Almost never			2
23. Without being asked, the patient physically helps other patients:			
Often	0		
Sometimes		1	
Almost never			2
24. With regard to friends on the ward, the patient:			
Has several friends	0		
Has just one friend		1	
Has no friends			2

	Circle *only* the number which applies		
25. The patient talks with other people on the ward:			
Often	0		
Sometimes		1	
Almost never			2
26. The patient has a regular work assignment:			
Away from the ward	0		
On the ward		1	
No regular assignment			2
27. The patient is destructive of materials around him (breaks furniture, tears up magazines, etc.)			
Never	0		
Sometimes		1	
Often			2
28. The patient disturbs other patients or staff by shouting or yelling:			
Never	0		
Sometimes		1	
Often			2
29. The patient steals from other patients or staff members:			
Never	0		
Sometimes		1	
Often			2
30. The patient *verbally* threatens to harm other patients or staff:			
Never	0		
Sometimes		1	
Often			2
31. The patient *physically* tries to harm other patients or staff:			
Never	0		
Sometimes		1	
Often			2
SUM OF RATINGS			

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Title: PSYCHOSOCIAL FUNCTION SCALE

Author: Putnam, Phyllis A.

Variable: The variable is psychosocial function. Psychosocial function is operationally defined as the ability to act in areas of life not immediately connected to the biochemical maintenance of life. This definition includes the knowledge and ability to interact with other people and to act in the interests of both preservation of self and enjoyment.

Description:

Nature and Content: This is an 8-item (category), fully anchored, 5-point (0-4) rating scale. Each item addresses itself to one aspect of psychosocial function; the eight items are: (1) interaction with nurses, (2) interaction with other patients, (3) use of spare time, (4) knowledge of current events, (5) knowledge of daily schedule, (6) expression of needs, (7) knowledge of hospital resources, and (8) knowledge of own resources. Each item has appropriate response alternatives.

Administration and Scoring: The scale is designed to be used by health care personnel to rate patients. Each sheet is arranged so that 24 different patients can be rated on each of the eight items by placing a check in the appropriate space beside the patient's name.

A total score is obtained for each patient by summing the ratings on each of the eight items.

Development:

Rationale: Traditionally nurses have used specific points of observation in assessing physical care needs. This instrument was developed from the idea that if nurses are to give the kind of organized attention to psychosocial function that they give to physical function, equally clear points of observation should be marked out. Nurses actually make psychosocial observations on patients as a matter of course, but usually do not formally record these observations. The present instrument provides for such formal recording.

Source of items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: No information was provided.

Reliability and Validity: Some reliability and validity data were provided by Putnam's (1973) study. Charge nurses rated each of their patients on the Psychosocial Function Scale for each of 6 weeks. Split-half reliabilities were calculated on each of these 6 weekly samples; the reliability coefficients ranged from 0.84 to 0.96. Sample size ranged from 43 to 46 patients.

In order to estimate validity, the charge nurses' Psychosocial Function Scale ratings for the 6 weekly samples were correlated with the Patient Interest Survey ratings completed by nursing aides. The Patient Interest Surveys recorded items such as: reads, watches TV, visits with other patients, etc. These correlations ranged from 0.62, significant beyond the 0.001 level, to 0.44, significant beyond the 0.01 level.

Validity was also estimated by correlating the scores of a continuous group of 33 patients. The patients' prestudy scores on a Self-Report of Activities were correlated with their first week Psychosocial Function Scale ratings, and their poststudy Self-Report scores were correlated with their 6th week Psychosocial Function Scale ratings. Correlations of 0.66 and 0.54, significant beyond the 0.01 level, were found.

Use in Research: This instrument was one of three used by Putnam to collect data for her study, "Nurse Awareness and Psychosocial Function in the Aged" (1973). The study was a preliminary test of the idea that nurses could include psychosocial observations in their usual workloads.

It was conducted in two nursing care units of a home for the aged. One of the units was an extended care facility and the other a unit for the care of patients with varying degrees of blindness associated with varying degrees of chronic illness. The patients were nonacutely ill residents who required some nursing supervision; all but a small minority were ambulatory. The nursing staff consisted of aides, licensed vocational nurses, and supervisory registered nurses.

Comments: Regular nursing personnel can record data on this instrument in ordinary patient care settings. Any potential user should review the author's operational definition of psychosocial function and be certain that it represents his(her) research interests. Although the evidence of reliability and validity and the ease of scoring might lead one to conclude that this is a usable, useful instrument, any potential user must determine its reliability and validity for his(her) own setting.

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Putnam, Phyllis

PSYCHOSOCIAL FUNCTION SCALE

	Interacts With Nurses					Interacts With Patients					Uses Spare Time					Knows Current Events					Knows Daily Schedule					Expresses Own Needs					Knows Hospital Resources					Knows Own Resources				
NAME	(4) Interacts Freely	(3) Responds to Nurses	(2) Recognizes Nurses	(1) No recognition	(0) Unable to Function	(4) Interacts Freely	(3) Responds to Pts.	(2) Recognizes Pts.	(1) No Recognition	(0) Unable to Function	(4) Always Occupied	(3) Usually Occupied	(2) Rarely Occupied	(1) Never Occupied	(0) Unable to Function	(4) Always Knows	(3) Usually Knows	(2) Rarely Knows	(1) Never Knows	(0) Unable to Function	(4) Always Knows	(3) Usually Knows	(2) Rarely Knows	(1) Never Knows	(0) Unable to Function	(4) Expresses Freely	(3) Some Expression	(2) Rare Expression	(1) Never Expresses	(0) Unable to Function	(4) Complete Knowledge	(3) Some Knowledge	(2) Little Knowledge	(1) No Knowledge	(0) Unable to Function	(4) Complete Knowledge	(3) Some Knowledge	(2) Little Knowledge	(1) No Knowledge	(0) Unable to Function

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Title: FUNCTIONAL LIFE SCALE (FLS)

Authors: Sarno, John E., Sarno, Martha T., and Levita, Eric

Variable: A noninstitutionalized individual's ability to participate in all of the basic daily activities which are customary for the majority of human beings is the variable assessed by this instrument.

Description:

Nature and Content: This rating scale has 44 items distributed among five categories: cognition (14 items), activities of daily living (7 items), home activities (8 items), outside activities (9 items), and social interaction (6 items). Most of the items are to be rated on each of four qualities: self-initiation, frequency, speed, and overall efficiency. On the instrument, where the authors considered it inappropriate to rate an item on a particular quality, they have placed an "X" to so indicate. In the "not applicable" column, the "X's" have been placed to indicate that it is inappropriate to check any of these items as being "not applicable." In the "not applicable" column, where there are no "X's," it will depend upon the client whether or not these items are applicable.

The FLS attempts to describe the patient in terms of what he actually does, not in terms of what he has the ability to do (Sarno et al., 1973).

Administration and Scoring: No special provisions are necessary for administration of the scale. However, raters must be trained to make accurate judgments. An attempt has been made to limit distortions in ratings by the type of items selected and the training of the raters (Sarno et al., 1973).

A scoring sheet is included in the FLS. Scores are reported as proportions, which are derived by dividing the subject's score by an adjusted maximum score (maximum possible score minus "not applicable" items). The 5-point continuum rating scale is as follows: 0—does not perform the activity at all, 1—very poor, 2—deficient, 3—approaches normal, 4—normal.

The rater rates each item for self-initiation, frequency, speed, and overall efficiency in order to obtain more information. While it creates increased difficulty in training raters, it is believed to add substantially to the value of the scale.

It is possible to achieve the same score for a variety of reasons. It is the total for *each item* which is important, since this defines what the patient actually does. The derivation of total scores for the various qualities can be used to determine the contributions of such factors as motivation and speed.

Development:

Rationale: How a disabled patient's impairments are reflected in his day-to-day activities are of great concern to those professionals working in rehabilitation medicine, since the success or failure of rehabilitation efforts must ultimately be measured in terms of functional achievement (Sarno et al., 1973). Before analyzing those specific factors in the patient's physical, mental, emotional, and environmental makeup which lead to successful rehabilitation, it is necessary to have the means of accurately picturing how the patient is living at any given moment. It was with these considerations in mind that the FLS was developed as a clinical, research, and teaching tool.

Source of Items: No information was provided.

Procedure for Development: No information was provided.

Reliability and Validity: Eleven staff members (physicians, speech pathologists, physical therapists, a psychologist, a nurse, and an occupational therapist) rated 25 patients with varying disabilities. Each patient was rated twice, the second time within a 2- to 3-week period. Median test-retest correlation coefficients (r) for the 11 raters on the four test-retest qualifying conditions were: self-initiation, 0.91; frequency, 0.92; speed, 0.89; overall efficiency, 0.89; and overall score, 0.92.

Evidence of concurrent validity was found by compari[illegible] the FLS ratings of 32 subjects with clinical judgments made about them by an experienced physiatrist. The Spearman rank-order correlation between FLS ratings and global evaluation by the physiatrist was 0.69, significant at 0.001 on the basis of a two-tailed test.

Use in Research: The FLS was introduced and described by its three authors, John Sarno, Martha Sarno, and Eric Levita in an article in the May 1973 issue of *Archives of Physical and Medical Rehabilitation* entitled "The Functional Life Scale."

Comments: As the authors stated, perhaps the instrument's most important potential value is in the investigation of factors related to the recovery (rehabilitation) or lack of it in the disabled patient (Sarno et al., 1973).

Reliabilities of the FLS are high, even for the category scores. The concurrent validity data, determined by comparing the FLS with the clinical judgment of one physiatrist, are, nevertheless, relatively good for this type of data. The measure appears to have content validity. It would be helpful to have information regarding the interitem, item-category, and intercategory characteristics of this instrument. A potential user will find it necessary to familiarize himself(herself) thoroughly with the instrument to assure accurate rating and scoring. Any potential user should contact the author for information on training raters.

Note: Dr. John Sarno brought to the attention of the editors the fact that program evaluators at Lutheran General Hospital in Park Ridge, Illinois, working together with the physical medicine and rehabilitation staff, developed *The Level of Rehabilitation Scale* (LORS), fashioned after the *Functional Life Scale*, in order to develop a stronger instrument.

A manual has been published describing the psychometric properties of the scale and procedure for using the scale in evaluation. It is available from the researchers who developed the scale: Raymond G. Carey, Ph.D., Director, Evaluation and Research Services, Lutheran General Hospital, 1775 Dempster, Park Ridge, Illinois 60068; and Emil J. Posavac, Ph.D., Department of Psychology, Loyola University of Chicago. An article describing the use of the LORS to measure the progress of stroke patients and the relationship of the LORS to other evaluation instruments entitled, "An Approach to the Evaluation of a Physical Medicine and Rehabilitation Program," will soon be published in the *Archives of Medicine and Rehabilitation*.

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Sarno, John E., Sarno, Martha T., and Levita, Eric

THE FUNCTIONAL LIFE SCALE (FLS)

Name ______________________

Date ________________

Chart # ______________

	Not Applicable	Self-Initiation	Frequency	Speed	Overall Efficiency	Total
COGNITION						
1. Is oriented for time (e.g., hour, day, week)	X	X	X	X		
2. Uses "yes" and "no" appropriately	X	X	X	X		
3. Understands speech (e.g., simple commands, directions, television)	X	X	X	X		
4. Calculates change (money)	X	X	X	X		
5. Does higher calculations (balance checkbook, etc.)	X	X	X	X		
6. Uses appropriate gestures in lieu of speech (not applicable for patients without speech impairment)						
7. Uses speech for communication	X					
8. Reads (e.g., street signs, ability to follow written instructions, books)	X					
9. Writes (e.g., signs name, writes or types letters) (Include motor disability)	X					
10. Social behavior is appropriate	X	X	X	X		
11. Able to shift from one task to another with relative ease and speed	X	X	X	X		
12. Aware of self (e.g., of mistakes, inappropriate behavior, poor judgement, etc.)	X	X	X	X		
13. Attempts to correct own errors (e.g., of judgement, mistakes, etc.)	X	X	X	X		
14. Has good memory (e.g, names of people, recent events, etc.)	X	X	X	X		
ACTIVITIES OF DAILY LIVING						
15. Able to get about (with or without brace, wheelchair, etc.)	X		X			
16. Does transfers	X		X			
17. Feeds self	X		X			
18. Uses toilet	X		X			
19. Grooms self (e.g., wash, brush teeth, shave, etc.)	X					
20. Dresses self	X		X			
21. Bathes self (including getting in and out of tub or stall)	X					
HOME ACTIVITIES						
22. Prepares simple food or drink (e.g., snacks, light breakfast)						
23. Performs light housekeeping chores (e.g., meals, dishes, dusting)						

	Not Applicable	Self-Initiation	Frequency	Speed	Overall Efficiency	Total
HOME ACTIVITIES						
24. Performs heavy housekeeping chores (e.g., floor or window washing, etc.)						
25. Performs odd jobs in or around house (e.g., gardening, electrical, auto, mending, sewing)	X					
26. Engages in solo pleasure activities (e.g., puzzles, painting, reading, stamps)			X	X		
27. Uses telephone (e.g., dialing, handling. Do not rate speech proficiency.)	X					
28. Uses television set (e.g., changing channel, etc.)			X			
29. Uses record player or tape recorder			X			
OUTSIDE ACTIVITIES						
30. Engages in simple pleasure activities (e.g., walks, car rides, etc.)	X			X	X	
31. Goes shopping for food					X	
32. Does general shopping (e.g., clothes, gifts, etc.)	X				X	
33. Performs errands (e.g., post office, cleaner, bank, pick up newspaper, etc.)	X					
34. Attends spectator events (e.g., theatre, concert, sports, movies)	X			X	X	
35. Uses public transportation accompanied (mass transportation)				X		
36. Uses public transportation alone (rate NA if item 35 is 0)				X		
37. Takes longer trips accompanied (plane, train, boat, car)				X	X	
38. Takes longer trips alone (rate NA if item 37 is 0)				X	X	
SOCIAL INTERACTION						
39. Participates in games with other people (e.g., cards, chess, checkers)				X		
40. Participates in home social activities (e.g., family gatherings, party, dancing)				X	X	
41. Attends social functions outside of home (e.g., home of friend, dining at restaurant, dance)				X	X	
42. Participates in organizational activities (e.g., religious, union, service club, professional)				X	X	
43. Goes to work or school at comparable premorbid level (not house-keeping at home) (Do not rate if item 44 is to be rated)				X		
44. Goes to work or school at lower than premorbid level (Do not rate if item 43 has been rated)				X		

(Multiply item 43 or 44 by 2)

SCORING SHEET

	Total Score	Max. Score	NA	Adjust. Max. (Max. - NA)	Total Score / Adjust. Max.	Proportion
Cognition		104				
ADL		92				
Home Activities		112				
Outside Activities		96				
Social Interaction		60				
Overall Score		464				
Self-Initiation Score		136				
Frequency Score		104				
Speed Score		84				
Overall Efficiency Score		140				

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Title: MENTAL HEALTH PATIENT ASSESSMENT RECORD

Authors: Vincent, Pauline A., Broad, Judith E., and Dilworth, Lora

Variables: This instrument assesses the physical, psychological, social, and medical behaviors of psychiatric patients following discharge from a hospital and behaviors of household members in relation to the patient, i.e., their communications with the patient, their perception and attitudes regarding the patient, and their adjustment to problems related to the patient.

Description:

Nature and Content: The Mental Health Patient Assessment Record consists of two sections—the first section is a checklist of patient behaviors; the second section, a Goals and General Performance Record, appears as a summary section following the checklist. The 16 items of the checklist are divided into five major behavior categories: physical behaviors (3 items), psychological behaviors (3 items), social behaviors (3 items), medical behaviors (4 items), household members' behaviors with patient (3 items). Response choices vary according to the item; the number of response choices, varying from four to seven, again, dependent upon the item. Columns are provided on the form to allow the initial and four subsequent assessments to be recorded on the same form. An example from the physical behavior category is "dresses self daily"—response choices are "not doing, rarely does, sometimes does, does most of the time, does regularly." An example from the category household members' behavior with patient is "communications with patient"—response choices are "not applicable, patient lives alone, primarily nonverbal, occasional direct verbal, frequent direct verbal, regular direct verbal."

The Goals and General Performance Record provides space for summarizing the goal set and performance achieved from each of the four patient behaviors, the household members' behaviors, and an "overall or general" goal and performance rating for a series of five assessments.

There is a key on the record for coding by number the goal set for the patient or household member (1 = maintain present functioning level, 2 = improve present functioning level, 3 = readmit to psychiatric hospital, 4 = discharge from agency) and a key for coding the performance of the patient or household member (1 = maintaining level of functioning in most areas, 2 = improved in at least one area of functioning, 3 = readmitted to psychiatric hospital, 4 = discharged from agency, 5 = decreased level of functioning in two or more areas, 6 = household member category only, not applicable, patient lives alone, or household has changed entirely).

Administration and Scoring: The investigator needs to be familiar with the instrument and the instructions provided for its use, which clarify the terminology, the intent of the items, and the instrument. No change or preparation of the environment or the patient is necessary, nor is it advisable.

Data are collected by the investigator during regular home visits to the patient; the assessment should be made at regular intervals. The investigator (1) completes the checklist by checking the response in each subcategory that best reflects the patient's level of functioning at the time of the assessment, and (2) makes an overall judgment for each major category concerning what the goals for the patient at the time of the next assessment should be.

The responses for each item are listed in order from the "least desirable" behavior to the "most desirable" behavior, therefore, identification of changes over time and, consequently, scoring is facilitated. The most desirable level of behavior is not intended to be the goal for each individual patient, for this might be inappropriate or unrealistic for some patients.

Since the instrument is designed to determine whether or not the patient's level of functioning is equal to, lower, or higher than the previous functioning level, scoring is zero, minus, or plus, depending on the difference between scores at the previous assessment and the present assessment. Interval scoring, with 0 for the lowest level and increments of 1 for each subsequent level, can be used. Concise directions for completing the checklist are given on the instrument itself. Instructions, which include some explanations of the purposes of the form and the rationale for the items, have been prepared by the authors, but are separate from the checklist.

Development:

Rationale: The Visiting Nurse Association of Cleveland has a mental health program which provides nursing services to psychiatric patients following discharge from Cleveland area hospitals. In an evaluation of the program, the Association found few assessment tools that were appropriate for appraising patient behavior according to patient objectives. The evaluating group wanted to develop an assessment tool that would assist the staff members who were responsible for patient's care as well as aid the mental health program evaluation.

Source of Items: The items were based upon a review of literature, the professional experience of the authors, and the objectives of the VNA Mental Health Program.

Procedure for Development: Once a working draft of the assessment form was developed, each of the directors in the four district offices identified two nurses who would be willing to evaluate the form. Suggestions from these eight nurses were incorporated into a revision. Following this, each nurse used the form to assess two of her psychiatric patients, and then reassessed each of them 1 month later. The nurses evaluated the form once more before their comments were incorporated into another revision. The consensus among these nurses was that the assessment should be repeated every 2 months.

Meetings were held in each of the four district offices to acquaint the entire staff with the form. Nine months later, written instructions were compiled which took into account the questions and problems staff encountered most frequently in using the form.

Reliability and Validity: Interobserver reliability of the form in relation to patient behaviors was ascertained by having two observers make simultaneous observations during home visits to a stratified random sample of new admissions. Both observers were present at an initial assessment (time I) in the home, and at another scheduled about 2 months later (time II). Subjects were 26 discharged psychiatric patients, 20 of whom were reassessed 2 months later. The product-moment correlations between observers, by category and visit are as follows:

Category	*Time I*	*Time II*
Physical behaviors	0.91	0.91
Psychological behaviors	0.93	0.91
Social behaviors	0.83	0.94
Medical behaviors	0.98	0.99
Overall behaviors	0.96	0.98

Use in Research: Vincent, Broad, and Dilworth (1976) describe the instrument and its development in the *Journal of Nursing Administration* article, "Developing a Mental Health Assessment Form."

Comments: The authors found that the section entitled "Household Members' Behaviors with Patient" presented problems to the staff nurses, because patients often lived alone, or even if they lived with others, they were frequently the only persons at home when the nurses came; so there were no interactions to observe.

The measure provides a framework for objectifying judgments about patients, so that changes can be observed over time. The measure is relatively short (e.g., there are only three items in the psychological behaviors category) which is probably one reason some experienced psychiatric nurses indicated that it did not provide them with much additional information. It should be noted that, in general, scales with only a few items tend to be relatively unreliable. However, the measure should be useful, and it could be made more sensitive to behavior changes by the addition of items and categories. Anyone contemplating using the instrument should be aware of a potential source of bias if the person who completes the checklist is also the care-giver.

References:

Stricklin, M. L. V. *The interobserver reliability of the mental health patient assessment record.* Unpublished master's thesis, Case Western Reserve University, Cleveland, 1976.

Vincent, Pauline A., Broad, Judith E., and Dilworth, Lora. Developing a mental health assessment form. *Journal of Nursing Administration*, 1976, *6*, 25–28.

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Instrument Copyright:

Journal of Nursing Administration
12 Lakeside Park
607 North Avenue
Wakefield, Mass. 01880

Vincent, Pauline A., Broad, Judith E., and Dilworth, Lora

MENTAL HEALTH PATIENT ASSESSMENT RECORD

Name ____________________

Address ____________________

Check the *one* item within each subcategory that best reflects the patient's current level of functioning. Consider the first item as "least desirable," the next items as intermediate progressions, and the last item listed within the subcategory as "most desirable."

Date | Date | Date | Date | Date

1. Physical Behaviors

a. *Dresses self daily*

- Not doing ____
- Rarely does ____
- Sometimes does ____
- Does most of the time ____
- Does regularly ____

b. *Food and nutrition practices*

- Not eating ____
- Eats much less than normal or prescribed diet ____
- Eats slightly less than normal or prescribed diet ____
- Has greater food intake than needed ____
- Eats adequate normal or prescribed diet ____

c. *Personal hygiene*

- Not bathing ____
- Rarely bathes ____
- Occasionally bathes ____
- Regularly bathes ____

2. Psychological Behaviors

a. *Motivation*

- Perceives no alternatives or alternate ways of dealing with situation ____
- Interested in examining problems and alternative ways of dealing with them ____
- Willing to examine problems and to try alternative ways of dealing with them ____
- Working on alternative ways of dealing with problems ____

b. *Communications*

- Primarily non-verbal ____
- Primarily symbolic verbal (e.g. delusional) ____
- Occasional direct verbal ____
- Frequent direct verbal ____
- Regular direct verbal ____

c. *Management of problems or crises*

- Inaccurate perception of situation ____
- Accurate perception of situation ____
- Aware of own reactions or feelings ____
- Able to control own actions or feelings ____
- Purposefully manages some problem situations ____

3. Social Behaviors

a. *Household chores* (e.g. housework, repairs, taking out trash, shopping, child care)

- Does none ____
- Rarely does any ____
- Does a few occasionally ____
- Does a few regularly ____
- Does many occasionally ____
- Does many regularly ____

b. *Social activities* (e.g. with family, neighbors, groups)

- Not involved in any ____
- Involved only with household members ____
- Rarely visits or is visited by others ____
- Occasionally visits or is visited by others ____
- Regularly visits or is visited by others ____

c. *Employment*

None, employable ____
None, not employable (e.g. housewife, retired, physically disabled) ____
Is student or in job training ____
Part time, sporadic ____
Part time, regular ____
Full time, sporadic ____
Full time, regular ____

4. Medical Behaviors

a. *Psychiatric supervision*

Not keeping appointments ____
Rarely keeping appointments ____
Keeping half of appointments ____
Keeping most of appointments ____
Regularly keeping appointments ____
No regular appointments, on p.r.n. ____

b. *Psychiatric oral medications*

None prescribed ____
Not taking prescribed ____
Rarely taking prescribed ____
Taking half of prescribed ____
Taking most of prescribed ____
Taking more than prescribed ____
Taking all as prescribed ____

c. *Medical supervision for physical problems*

None, no apparent medical problems ____
None, has apparent medical problem ____
Under supervision, no apparent medical problem ____
Under supervision for apparent medical problem ____

d. *Medicines for diagnosed medical problems*

None prescribed ____
Prescribed, but not taking any ____
Rarely taking prescribed ____
Taking half of prescribed ____
Taking most of prescribed ____
Taking all as prescribed ____

5. Household Members' Behaviors with Patient (i.e. general climate of interactions)

a. *Communications with patient*

Not applicable, patient lives alone ____
Primarily non-verbal ____
Occasional direct verbal ____
Frequent direct verbal ____
Regular direct verbal ____

b. *Perceptions and attitudes regarding patient*

Not applicable, patient lives alone ____
Inaccurate perception of patient's situation ____
Accurate perception of patient's situation ____
Aware of their reactions to patient ____
Able to control their reactions to patient ____

c. *Adjustment to problems related to patient*

Not applicable, patient lives alone ____ ____ ____
Perceive no alternative ways of dealing with problems ____ ____ ____
Interested in examining problems and alternative ways of dealing with them ____ ____ ____
Willing to examine problems and to try alternative ways of dealing with them ____ ____ ____ ____
Working on alternative ways of dealing with problems ____ ____ ____ ____ ____

Date | Date | Date | Date | Date

GOALS AND GENERAL PERFORMANCE RECORD

	Date		Date	Date			Date		Date	Date
	Goal	Perf.	Goal	Perf.	Goal	Perf.	Goal	Perf.	Goal	Perf.
Patient Behaviors										
Physical										
Psychological										
Social										
Medical										
Household Members' Behaviors										
Overall/General										

Key for Goal:

1 = Maintain present functioning level
2 = Improve present functioning level
3 = Re-admit to psychiatric hospital
4 = Discharge from agency

Key for Performance (Perf.)

1 = Maintained level of functioning in most areas
2 = Improved in at least one area of functioning
3 = Re-admitted to psychiatric hospital
4 = Discharged from agency
5 = Decreased level of functioning in two or more areas
6 = (for category 5, Household Members *only*) Not applicable, patient lives alone or household has changed entirely

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Instruments for Measuring Nursing Practice and Other Health Care Variables

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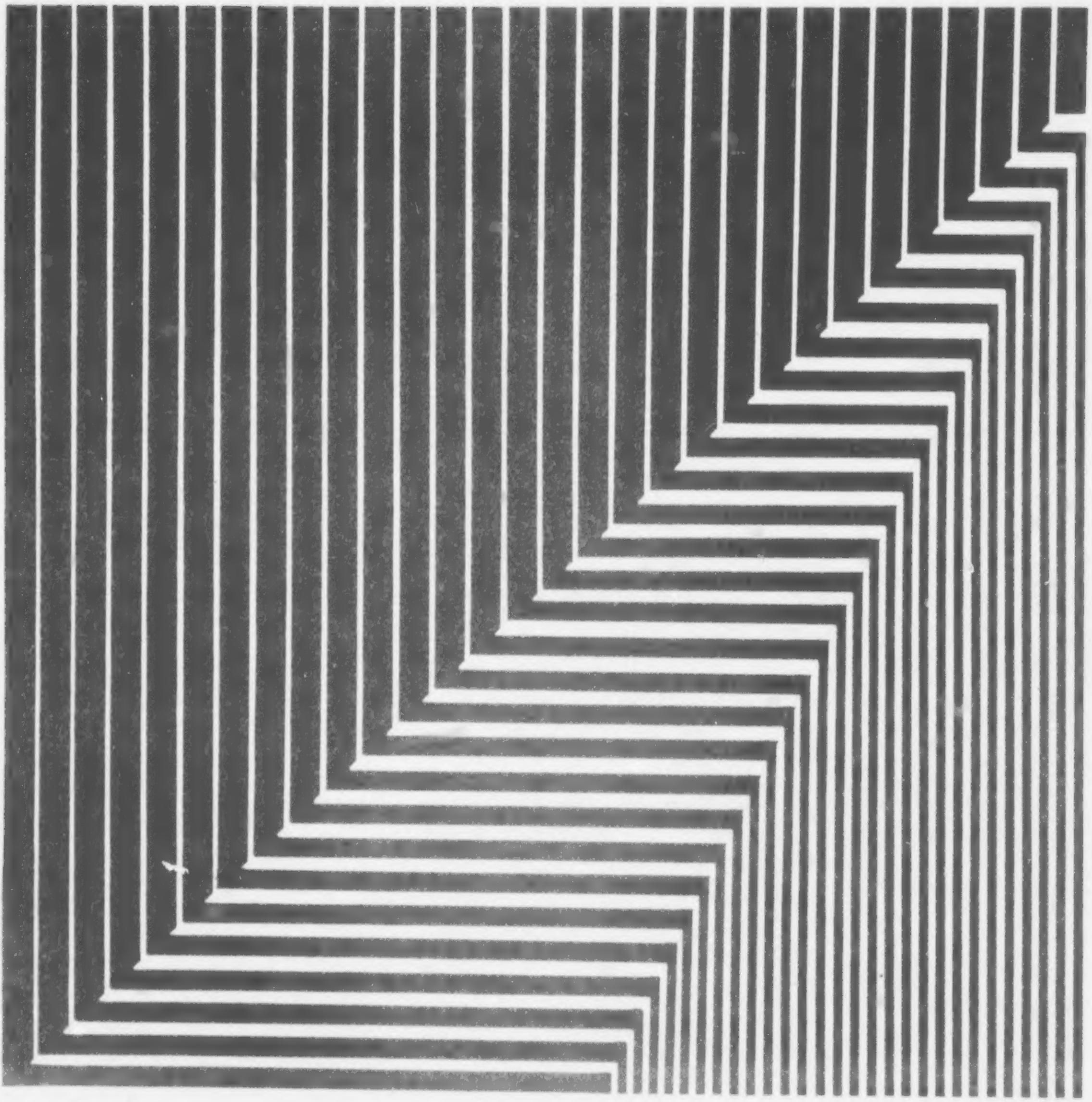

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VOLUME 2

HEALTH MANPOWER REFERENCES

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Provider-Client Interaction: Provider Behavior

Title: PREMATURE INFANT ACTIVITY SCHEDULE (PIAS)

Authors: Chamorro, Ilta, Davis, Mary, Green, Dora, and Kramer, Marlene

Variables: This instrument provides information on seven variables: caretaking activity, therapeutic activity, position of infant, number of caretakers in contact with infant, infant behavior, other stimuli, and loud noises.

Description:

Nature and Content: This observer-completed instrument is a checklist of 58 items that describe a variety of situations or events which involve a nurse and/or a premature infant.

Caretaking activities are operationally defined by responses to 20 items such as "talks to infant." *Therapeutic activities* are operationally defined by responses to eight items such as "stimulates to breathe." *Position of infant* is operationalized by responses to five items such as "on stomach." *Number of caretakers in contact with infant* is operationalized by counting the number of adults who are able to see, hear, and carry out activities listed on the schedule. *Infant behavior* is operationalized by responses to 14 items such as "moves actively." *Other stimuli* is operationalized by responses to six items such as "mobiles in isolette." And, *loud noises* is operationalized by responses to three items such as "alarm."

Administration and Scoring: This instrument is designed to time-sample events. One hundred and twenty 1-second observations are made of the nurse(s) and/or premature infant each hour. After each observation, the observer has 19 seconds to record the events observed on the schedule. A 5-minute rest period follows each set of 30 observations.

No instructions are provided for scoring either the 58 items or the 7 variables in this instrument.

Development:

Rationale: The primary theoretical basis for the research for which the instrument was developed is the infant Kinesthetic Need Theory postulated by Kulka et al. (1960), with elaboration and extension by other investigators, and Hebb's (1949) Neuropsychological Theory (Kramer et al., 1975).

Source of Items: The items used in this instrument were developed from the observations of the authors. The work of Wolff (1959), Rheingold (1960), and the consultation of several nurse practitioners also were used to develop and define the items contained in this instrument.

Procedure for Development: After a study of the literature, the authors "defined, observed infants, redefined, observed again, (and) consulted with nurse practitioners on their understanding of the behavior signified by (terms) . . . and finally evolved the definitions for the (items)" (Chamorro et al., 1973). No information is provided regarding the premature infants, nurses, or observers used in the development of this instrument.

Reliability and Validity: No information is provided regarding the test-retest or split-half type characteristics of the items or variables of this instrument. However, information on the interobserver reliability of the PIAS is available, based on five observers who worked in mixed pairs. These observers made independent observations during sixty-two 10-minute periods. Twenty-six of these observation periods occurred prior to the onset of the study described above (see *Rationale*), and 36 occurred during the course of the study. All observations were made on infants of the same gestational age, weight, and health status. The median percent of agreement on the 23 infant items was 89. The median percent of agreement on the 35 caretaker-type items was 86. The results also suggested that the longer the training and the more involved were the observers in the delineation and definition of the items, the higher the percent of interobserver agreement. That is, the median interobserver reliability for the authors was 94 percent, while that for the authors, when paired with two psychology students who assisted in the study, was 86 percent.

Information on interobserver agreement was also derived by correlating the frequencies obtained for each item during a 10-minute period. These correlations ranged from 0.33 to 1.00. The median correlation obtained was 0.94.

Reliability information was also gathered by continuously videotaping one infant and its caretakers for 2 hours and 10 minutes. No sounds were recorded on this tape. One observer made a total of 180 observations of this tape. The same observer repeated these observations 24 hours later. The median percent of agreement was 98.

The authors indicate that the problem of validity is negligible, since the data consists of direct behavioral observations. Because they use a time-sampling procedure, the question of validity becomes one of the extent to which the time-samples of behavior are representative of the total set of behaviors from which the samples are drawn. Since it is difficult to continuously observe and record events, only nine caretaking events were selected to provide this information. One observer used the time-sample procedure; the second continuously observed the nurse-infant behaviors. Data were collected across eleven 10-minute periods. The median percent of agreement was 90.

Use in Research: The development and use of the instrument are described in the Chamorro et al. (1973) publication referenced below. The instrument was also used in a study by Kramer et al. (1975), which involved an experimental group of eight premature infants and a control group of six premature infants.

Comments: The PIAS would appear to provide useful information on the seven variables or areas it purports to measure. However, it would be desirable to develop a scoring procedure that would make it possible to combine the item data into scores that could then be used to test hypotheses regarding the effects of other factors on these variables. It would also be desirable to gather information on the inter-item characteristics of the test. Such data could then be used to group the behaviors into subsets (variables) that could be used either for descriptive or predictive type studies.

Since observer time is expensive, it would also be desirable to provide information regarding the minimum number of 10-minute observation periods per infant that are required in order to provide accurate information about that infant.

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Instrument Copyright:

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New York, N.Y. 10019

Chamorro, Ilta, Davis, Mary, Green, Dora, and Kramer, Marlene

PREMATURE INFANT ACTIVITY SCHEDULE

PREMATURE ADAPTATION INSTRUMENT

CARETAKING ACTIVITIES
- Looks at face
- Talks
- Talks to infant
- Supports in isolette
- Holds
- Puts infant down
- Caresses face
- Pats
- Touches baby
- Diapers
- Combs
- Shampoos
- Washes
- Hands in isolette
- Adjusts position
- Feeds by gavage
- Feeds by bottle
- Wraps in blanket
- Gives pacifier
- Other

THERAPEUTIC ACTIVITIES
- Takes vital signs
- Taps isolette
- Stimulates to breathe
- Gives injection
- Makes venipuncture
- Takes heelsticks
- Nasopharyngeal suction
- Weighs

POSITION OF INFANT
- Lateral
- On stomach
- On back
- In arms
- In arms outside

NUMBER OF CARETAKERS IN CONTACT WITH INFANT
- 1
- 2 or more

INFANT BEHAVIOR
- Eyes open
- Eyes closed
- Hand-mouth contact
- Vocalizes
- Cries
- Precry face
- Mouthing
- Vomiting
- Sucking
- Moves head
- Moves
- Moves actively
- Passing feces
- Other

OTHER STIMULI
- Radio on in isolette
- Mobiles on isolette
- Bilirubin light on
- Skin leads
- Objects
- Out of isolette

LOUD NOISES
- Alarm
- Dropping things
- Other

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Title: GRAFFAM SCHEDULE OF NURSE RESPONSE TO PATIENTS' COMPLAINTS OF DISTRESS

Author: Graffam, Shirley R.

Variables: This instrument provides information on nine variables: type of distress, initiation of complaint, persons involved in communication, evaluation of complaint, referral for definitive action, implementation of physical measure of relief, use of psychological measures or approaches, evaluation of relief measure, and response-timing. *Type of distress* is defined as suffering, being under stress or strain and needing relief, and having discomfort. *Initiation of complaint* is defined as circumstances of the initial reporting or detecting and confirming of distress. *Persons involved in communication* is defined as persons involved with receiving the patient's complaint and implementing action to provide relief. *Evaluation of complaint* is defined as attempts to ascertain the nature and severity of the distress. *Referral for definitive action* is defined as giving the management of the complaint to another for definitive action. *Implementation of physical measure of relief, use of psychological measures or approaches, evaluation of relief measure,* and *response-timing* are defined within the context of the instrument items.

Description:

Nature and Content: This instrument is a checklist of items designed to elicit data on the variables identified above. A 1-point (check if "yes") response scale is used to record responses to 128 of these items. A 2-point ("yes"-"no") response scale is provided for five items. The number of minutes is to be recorded for two items.

The variables are operationalized by responses to various subgroups of questions contained in the instrument. *Type of distress* is operationalized by responses to 36 questions such as "nausea/vomiting." *Initiation of complaint* is operationalized by responses to 11 items such as "complaint made on rounds." *Persons involved in communication* is operationalized by responses to 11 items such as "First communicated to aide/orderly," nine items such as "Intermediary: Nurse in charge," and 10 items such as "Action concluded by: Practical nurse." *Evaluation of complaint* is operationalized by responses to seven items such as "Distress confirmed verbally." *Referral for definitive action* is operationalized by a "yes" or "no" response. *Implementation of physical measure of relief* is operationalized by responses to 23 questions divided into three sets: administration of a drug (e.g., inhalation, oral), implementation of a treatment (catheterization), and provision for general comfort (backrub given). *Use of psychological measures or approaches* is operationalized by response to 23 questions divided into four categories: exploration with patient of cause of distress, expression blocked (e.g., changed the subject); address of patient or relative (e.g., affectionate term, given name); and direct comments made to influence patient or relative (e.g., comfort, ridicule). *Evaluation of relief measures* is operationalized by responses to two items such as "prior relief measure's effectiveness." *Response-timing* is operationalized by giving the number of minutes from the initiation of the complaint to conclusion of the action and the total duration of the nurse-patient interaction.

Administration and Scoring: The instrument is completed by an observer of a patient-nurse interaction. Instructions are provided as part of the questionnaire. The observer accompanies a nurse on her(his) tour of duty, and records the relevant data.

No information regarding scoring of the 135 items was provided.

Development:

Rationale: The instrument was evolved in the process of developing a technique for the study of nurses' responses to patients who are in distress.

Source of Items: The items evolved from the author's content analysis of her descriptive narratives of nurse-patient interaction which she had observed in the clinical setting.

Procedure for Development: Initially, 101 events involving 50 nurses responding to 124 patients' complaints were observed in three hospitals by the author. The data, which were collected in narrative form, were later coded as "complaint" or "relief action or response to complaint." Each of these categories was further divided until all the data had been accounted for. Directions were written with illustrations of each category. The instrument was used in two additional hospitals, with 56 events, 25 nurses, and 72 complaints being recorded. Several subcategories were added for new complaints and responses, and the directions were further clarified and enlarged. A total of 157 patients, 75 nurses, and 196 complaints were used in the development of the instrument. The format was changed to two pages which permitted items dealing with the complaint and the response to be clearly in view throughout the event.

Reliability and Validity: Two sets of information are available regarding the interobserver reliability characteristics of the items contained in this instrument. In the first instance, two nurse educators jointly observed three events. For two of these events, there was 87 percent agreement on the 60 categories checked. For the third event, there was 100 percent agreement. In the second instance, two other nurse educators jointly observed 15 events. In 10 of the events, there was 100 percent agreement; for the remaining five events, the percent of agreement ranged from 92 percent to 98 percent.

The procedure used for its development established the content validity of the instrument (Graffam, 1969).

Use in Research: Graffam (1969) described the development and use of this instrument in her dissertation research and in the *Nursing Research* (1970) article referenced below.

Comments: As the instrument currently stands, it can provide descriptive data which could be used to generate hypotheses for further research. It offers potential for development of an instrument which allows a clearly defined variable to be quantified.

Some terminology used in the instrument needs clarification, e.g., who is meant by "second nurse" (Part C, question 2c)?

It would be helpful to have information regarding the inter-item and between-variable characteristics. It would be useful to have interobserver reliability information for the nine measures based on a much larger and wider range of patient events where these events were identified. Such information would make it easier to determine which patient-events were more likely to provide reliable information. It would also be useful to have information on the relationship between these variables and others that should presumably be related (or not related, as the case may be) to them.

References:

Graffam, Shirley R. Nurse response to the patient in distress—development of an instrument. *Nursing Research*, 1970, *19* (4), 331–336.

______. *A technique for the study of nurse response to adult patients' complaints of distress.* Unpublished doctoral dissertation, Teachers College, Columbia University, 1969.

Source of Information:

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Instrument Copyright:

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Graffam, Shirley R.

GRAFFAM SCHEDULE OF NURSE RESPONSE TO PATIENTS' COMPLAINTS OF DISTRESS

Date:
Day:

Nurse Code #
Patient Code #

PATIENT DATA

A. Age in years:
___1. 16-20
___2. 21-25
___3. 26-30
___4. 31-35
___5. 36-40
___6. 41-45
___7. 46-50
___8. 51-55
___9. 56-60
___10. 61-65
___11. 66-70
___12. 71-75
___13. 76-80
___14. 81-85
___15. 86-90
___16. 91-100

B. Sex:
___1. Male ___2. Female

C. Race:
___1. Negro ___2. White ___3. Other ____________________

D. Diagnosis: ____

TIMING (Minutes and Seconds)

A. Initiation of Complaint to Conclusion of Action __________

B. Total Duration of Nurse-Patient Interaction ____
____
____
Total ____

COMPLAINT

A. TYPE OF DISTRESS

___1. Anger
___2. Boredom
___3. Burning sensation
___4. Cold sensation
___5. Constipation
___6. Cramps
___7. Disappointment
___8. Dizziness
___9. Dyspnea
___10. Embarrassment
___11. Fatigue
___12. Faulty equipment
___13. Feelings of helplessness
___14. Grief
___15. Headache
___16. Hemorrhage
___17. Hemorrhoids
___18. Hunger
___19. Inability to void
___20. Insomnia
___21. Itch
___22. Nausea/vomiting
___23. Nervousness/anxiety/fear
___24. Objections to restraints
___25. Pain
___26. Pressure
___27. Procedure omitted
___28. Restlessness
___29. Soreness
___30. Sore throat
___31. Sweating
___32. Tachycardia
___33. Thirst
___34. Warmth
___35. Weakness
___36. Other ____________________

B. INITIATION OF COMPLAINT

___1. Complaint made during care
___2. Complaint made on rounds
___3. Physician reported
___4. Nurse noted without report
___5. Patient came to nurse
___6. Relative came to nurse
___7. Second patient reported
___8. Patient signaled
___9. Inhalation therapist noted
___10. Nurse made specific check on patient
___11. Other ____________________

C. PERSONS INVOLVED IN COMMUNICATION

1. First communicated to
___a. Aide/orderly
___b. Inhalation therapist
___c. Nurse in charge
___d. Physician
___e. Practical nurse
___f. Relative
___g. Staff nurse
___h. Student nurse
___i. Volunteer
___j. Ward clerk
___k. Other ____________________

2. Intermediary
___a. Nurse in charge
___b. Physician
___c. Second nurse
___d. Staff nurse
___e. Student nurse
___f. Supervisor
___g. Third nurse
___h. None
___i. Other ____________________

3. Action concluded by
___a. Aide/orderly
___b. Inhalation therapist
___c. Nurse in charge
___d. Physician
___e. Practical nurse
___f. Practical and registered nurse
___g. Second practical nurse
___h. Second staff nurse
___i. Staff nurse
___j. Student nurse

Nurse Code ___
Patient Code___

II. RELIEF ACTION or RESPONSE TO COMPLAINT

A. Evaluation of Complaint
- ___1. Distress confirmed verbally
- ___2. Further data sought in questions
- ___3. Inspection
- ___4. Palpation
- ___5. Vital signs taken
- ___6. None
- ___7. Other ________________

B. Referral to Another for Definitive Action ___1. Yes ___2. No

C. Implementation of Physical Measure of Relief
1. Administration of a Drug
   a. Route
   - ___1) Inhalation
   - ___2) Local application
   - ___3) Oral
   - ___4) Parenteral
   - ___5) Other ____________________

   b. Patient permitted choice of site for injection
   ___1) Yes ___2) No

2. Implementation of a Treatment
   - ___a. Catherterization
   - ___b. Cold application
   - ___c. Dressing change/adjustment
   - ___d. Equipment adjustment
   - ___e. Heat application
   - ___f. Infusion slowed
   - ___g. Oxygen administered
   - ___h. Treatment stopped
   - ___i. None
   - ___j. Other ________________

3. Provision for General Comfort
   - ___a. Backrub given
   - ___b. Drink given
   - ___c. Food given
   - ___d. Linen changed/adjusted
   - ___e. Position changed
   - ___f. Bathed
   - ___g. Other ________________

D. Use of Psychological Measures or Approaches
1. Exploration with Patient of Cause of Distress
   ___a. Yes ___b. No

2. Expression Blocked
   - ___a. Changed the subject
   - ___b. Failed to follow patient's cue
   - ___c. Left the room abruptly
   - ___d. Other ____________________

3. Address of Patient or Relative
   - ___a. Affectionate term
   - ___b. Given name
   - ___c. Nickname
   - ___d. "Sir"
   - ___e. Surname
   - ___f. No term
   - ___g. Other ____________________

4. Direct Comments Made to Influence Patient or Relative
   - ___a. Comfort
   - ___b. Contradict
   - ___c. Control
   - ___d. Direct
   - ___e. Inform
   - ___f. Ridicule
   - ___g. Scold
   - ___h. Suggest relief
   - ___i. Teach
   - ___j. None
   - ___k. Other ________

E. Evaluation of Relief Measure
1. Prior Relief Measure's Effectiveness ___a. Yes ___b. No
2. Current Relief Measure's Effectiveness ___a. Yes ___b. No

III. OTHER: (Comments and Additional Categories)

Directions for the Use of the Instrument

Fill in the date and day prior to the observation. When a complaint is made, record the time on the blank preceding the reported type of distress. Mark all other pertinent items with a check mark (✓) or fill in "Other" when indicated. At the conclusion of the observation, fill in the information requested on the title page. Additional pertinent data considered important can be recorded on the last page under "Comments."

DESCRIPTION OF THE CATEGORIES

I. COMPLAINT

A. TYPE OF DISTRESS (suffering; being under stress or strain and needing relief; discomfort). DISTRESS includes physical and/or emotional discomfort from mild to severe in degree. The patient may state the type of distress directly (i.e., I have pain, I am nauseated) or indirectly (i.e., I need my pills, I want a shot). The nurse may detect the distress before a complaint is registered, but the patient must then confirm the accuracy of the observation. The situation may help describe the type of distress (i.e., a relative viewing the body of the deceased may cry, a child's crying may cause the patient to talk about her own deceased child; a patient waiting for a doctor who has left the hospital talks about this experience with tears and cursing and threatens to leave the hospital).

When multiple complaints are made, each is counted. In such a case, it is helpful to use the number of the complaint in subsequent parts of the instrument rather than a check mark in order to correlate the action with the specific complaint. While two or more types of distress may occur simultaneously, only those reported or confirmed by the patient are registered as complaints. Each event is counted, i.e., one patient being responded to in two instances is counted twice and two instruments are filled in.

B. INITIATION OF COMPLAINT

This refers to the circumstances of the initial reporting or detecting and confirming of distress.

1 and 2. During care or rounds indicates that the nurse or his delegate noting the distress is already in the unit for some reason other than to hear the complaint. Care refers to such activities as bathing, positioning, comforting, regardless of the time of day. Rounds refers to visits to the bedside to administer medications, bring trays, or observe the patient.

3, 5, 6, 7, and 9. These items refer to those times when someone seeks the nurse's attention by approaching him with a complaint.

4. *Detected without complaint* refers to instances where the nurse interprets symptoms or deems the recency of surgery as evidence that the patient is in distress and seeks confirmation prior to a complaint.

8. *Patient signaled* refers to the use of the call light, intercommunications system, or voice.

10. *Nurse made specific check* refers to those instances where the nurse with prior knowledge of distress makes a visit to the bedside to check the patient's condition.

C. PERSONS INVOLVED IN COMMUNICATION

This refers to the persons involved with receiving the patient's complaint and implementing action to provide relief. *Nurse*, unless otherwise specified, refers to the registered nurse on staff duty or in administration; *physician* refers to interne, resident, or staff doctor. Persons other than nurse and physician may be involved in the communication of the complaint.

1. *First communicated to* refers to the person receiving the complaint initially or recognizing distress and seeking confirmation.

2. *Intermediary* refers to the person(s) who enables the nurse to ensure that a course of action leading to relief will be effected, i.e., a physician giving an order or a supervisor obtaining a medication. This is not to be

confused with Part II.B. REFERRAL FOR DEFINITIVE ACTION, where the nurse requests another person to take definitive action leading to relief.

3. Concluded by refers to the person(s) who completes the relief action, i.e., the nurse giving a treatment or medication, the orderly doing a treatment, the nurse making statements, or the physician treating or talking to the patient. Those to whom the complaint has been referred for definitive action (Part II.B) are included in this section.

II. RELIEF ACTION or RESPONSE TO COMPLAINT

A. EVALUATION OF COMPLAINT

The nurse attempts to ascertain that distress is present and its nature and severity.

1. Distress confirmed--The nurse may ask the patient, "Do you have pain?" "Are you nauseated?" He may affirm, "You do have pain?"

2. Further data sought in questions--The nurse asks questions of the patient in order to help him determine the intensity and location of the distress. He may ask, "Where does it hurt?" or "You have a lot of pain?"

3,4. Inspection/Palpation--The area about which the patient complains is inspected or palpated to confirm the nature of the distress.

5. Vital signs taken--These indicators of general condition are observed specifically to assist the nurse in evaluating the complaint.

6. None--This refers to those instances in which no evaluation is made prior to relief action, i.e., the nurse hears the complaint and immediately administers a drug.

B. REFERRAL TO ANOTHER FOR DEFINITIVE ACTION

This refers to those instances in which the nurse gives the management of the complaint to another for definitive action, i.e., an orderly may be asked to catheterize a patient, a clergyman may be called to console relatives of the patient. This is not to be confused with Part I.C. Intermediary, where another person enables the nurse to ensure that a course of action leading to relief will be effected.

C. IMPLEMENTATION OF A PHYSICAL MEASURE OF RELIEF

1. ADMINISTRATION OF A DRUG

The patient is given a drug with the specific purpose of relieving distress. Placebo is included here because its purposes and actions are the same. When the patient is given an injection, he may spontaneously state his preference or point to a site; the nurse may ask, "Which side?" The nurse may give the injection without asking the patient to make a decision about the site.

2. ADMINISTRATION OF A TREATMENT

Some treatment is completed with the express purpose of relieving the distress.

3. PROVISION FOR GENERAL COMFORT

Attention is paid to the patient's general state of comfort. The purpose of the comfort measures must be to relieve the specific distress, as by giving a drink to a patient who complains of thirst or food to one who is hungry. When either is given incidentally, it is not counted. In like manner, when linen is changed or tightened, or a blanket is added for a specific complaint, it is counted. Position change may be from side to side, or to or from the patient's back or abdomen. It may refer to putting a patient back to bed only when relief from the distress about which he complains is thereby relieved. Position change may also include elevating an extremity to provide comfort.

D. USE OF PSYCHOLOGICAL MEASURES OR APPROACHES

1. EXPLORATION WITH PATIENT OF CAUSE OF DISTRESS

The nurse asks questions related to the possible cause of the distress as viewed by the patient. He may ask, "Have you had headaches at home?" or "The nitroglycerin has not helped you?" or he may say, "Tell me just how you feel."

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2. EXPRESSION BLOCKED

The nurse may close off communication from the patient about a subject he has initiated in conversation. He may do this by leaving the room immediately after the subject has been mentioned or he may change the subject after the patient has made an emotionally charged statement. The nurse may fail to follow the patient's lead in conversation and not respond to an invitation to discuss the subject the patient has initiated.

3. ADDRESS OF PATIENT OR RELATIVE

The nurse may address the patient or his relative with any of the terms listed; no term of address at all may be used. When two or more terms are used, all are counted.

4. DIRECT COMMENTS TO INFLUENCE PATIENT OR RELATIVE

a. Comfort (relieve, impart strength and/or hope), e.g., "Every day it will get a little better." "Then you can have your cup of hot coffee." "I hope your lip is healing well." "I'll help you; we'll make it real comfortable with pillows." "They're going to take you downstairs and fix you up."

b. Contradict (deny, assert the contrary of), e.g., "I've been visiting you a lot during the night. You were sleeping."

c. Control (check or regulate; keep within limits; exercise restraining power over). The intention here is to change the behavior without necessarily providing relief, e.g., "You have just eaten." "We have to tie your hands to protect you." "Don't worry about it."

d. Direct (cause a person to move or follow a course; point out the right way). The intention here is to guide behavior to help achieve relief, e.g., "Will you roll over?" "Try to relax and sleep." "Put your light on if you feel bad." "Tell your doctor about it."

e. Inform (tell, enlighten, make aware of), e.g., "We've called the doctor." "This will take a few minutes to work; you'll feel a pinch." "Your doctor is a busy man." "I'm going to tighten your sheets."

f. Ridicule (laugh at mockingly or disparagingly, belittle), e.g., "Be sure you put on your coat" (to abscond). "The barium enema isn't that bad that you need to pray about it." "You're unbelievable, _____. Don't you look jazzy in your new shave." "You're cute."

g. Scold (rebuke in irritation, chide severely), e.g., "You need to stay here 'til you're well; so relax." "Why didn't you tell me this before?"

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Title: NURSE TEACHING RATING SCALE (NTRS)

Author: Hayman, Joyce L.

Variables: The NTRS measures 10 competency areas that are congruent with the components of the teaching process:

1. intent of the presentation clear
2. prerequisite knowledge of learner recognized
3. content at entry level of learner
4. content relevant to learner needs
5. all content pertinent
6. appropriate instructional materials used
7. presentation stimulated two-way participation
8. attention of learner maintained
9. content presented complete
10. teacher attempted to valuate learner's understanding.

Description:

Nature and Content: For each area listed above, there are five short descriptions representing various levels of competency arranged on a 5-point rating scale of high to low. The higher the score, the higher the quality of teaching presentation.

Administration and Scoring: The NTRS can be rated and scored by the nurse's supervisor, peers, or the nurse teacher herself(himself) in evaluating teaching competence. The entire patient teaching session should be observed before the rating scale is completed. Only the verbal behavior is evaluated either by direct observation or by evaluating audiotape or videotape recordings. Rating is accomplished by: (1) reviewing each competency, (2) selecting the group of competency indicators that most closely reflect the nurse-teacher's behavior, and (3) recording the score (ranging from 1 to 5) for each competency. The scores for each of the 10 competencies are summed to obtain a total score. The total score is divided by the number of scores (10) to obtain a mean score.

Time spent observing the teaching process will usually be the largest part of the procedure and will vary considerably depending on the difficulty of the material, the ability of the teacher, etc. Rating and scoring can be completed quickly and easily by a rater who is thoroughly familiar with the competency indicators.

A manual containing instructions for scoring the NTRS, a sample rating form, and competency indicators for each competency is available from the author.

Development:

Rationale: One instructional technology model of the teaching process delineates those elements of teaching behavior which can be analyzed and monitored to maintain control and provide feedback on the instructional system (Hayman, 1975). The NTRS was developed to meet the need for a competency-based monitoring system and to yield data for the analysis of the elements of the teaching process used by nurses.

Source of Items: The content of the NTRS was based upon the author's experience, an extensive review of the relevant literature, and input from experts in instructional technology and nursing.

Procedure for Development: Approximately 1 year of varied informal analyses combined with the author's experience with teaching, rating scales, and evaluating forms resulted in the present instrument.

Reliability and Validity: Five nurses functioning as teachers voluntarily recorded a preoperative patient teaching situation conducted in a one-to-one setting on an audio cassette recorder. Each audiotape was analyzed independently by five nurses of varying professional levels trained in the use of the NTRS. The scores given to each nurse teacher by each rater were tested with Kendall's coefficient of concordance yielding an interrater reliability ($W = 0.695$).

The content validity of the instrument was assessed through a comparison of the NTRS competencies with the elements of the teaching process as described by nine investigators in the area. The author reports that the NTRS overlapped completely with the descriptions of seven of the nine authors and 80 percent or better with the other two. Also, the NTRS was submitted to experts in instructional technology, instructional systems, and nursing. They agreed that the theoretical principles of the teaching process were reflected in the NTRS.

Validity was determined by comparing nurse teacher scores on the NTRS with scores obtained from the same five raters on the same five audiotapes, using the Medical Instruction Observation Record (MIOR) developed by Jason (Hayman, 1975). The mean Spearman rank correlation coefficient between scores on the NTRS and the MIOR generated by the five raters was 0.862.

Use in Research: The NTRS was developed and used by Hayman (1975) in her doctoral study at Georgia State University.

Comments: As the author pointed out, the NTRS monitors the process of teaching rather than teaching content and can be used by student nurses in developing their skill in patient teaching. Thus, the NTRS can find application as a learning tool as well as an evaluation tool. Because the competency indicators are general statements about the teaching process, the NTRS can be used in virtually any teaching situation.

Only continued use of the NTRS will provide sufficient information to assess its reliability and to determine the appropriateness of the present scoring categories.

References:

Hayman, Joyce L. *The development of a competency based monitoring system analyzing nurse teaching behavior in a patient teaching situation.* Doctoral dissertation, Georgia State University, 1975.

Source of Information:

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Hayman, Joyce L.

NURSE TEACHING RATING SCALE (NTRS)

Date: ________ **Nurse Teacher Code:** ________ **Rater:** __________

Instructions

The NTRS is designed to be scored at the completion of a patient teaching situation. The entire patient teaching session should be observed before the rating scale is filled out.

Only the nurse teacher's verbal behavior is evaluated. This evaluation may be done by direct observation or by evaluating audio tape or video tape recordings.

SCORE		COMPETENCY
_____	1.	Intent of the presentation clear
_____	2.	Prerequisite knowledge recognized
_____	3.	Content at entry level of learner
_____	4.	Content relevant to learner needs
_____	5.	All content pertinent
_____	6.	Appropriate instructional materials used
_____	7.	Presentation stimulated two-way participation
_____	8.	Attention of learner maintained
_____	9.	Content presented complete
_____	10.	Teacher attempted to validate learner's understanding

Composite Score: ______

Mean Score: ______

A scale of 5 to 1 is used to rate the teacher on each competency. Higher numbers reflect a higher rating based on competency indicators for each competency.

Competency Indicators for NTRS

1. Intent of presentation clear

Score

5 The intent or objectives are stated at the beginning of the presentation. The scope and sequencing of material is identified at the beginning of the presentation.

4 The intent or objectives are implied at the beginning of the presentation. The scope and sequencing of material are implied at the beginning of the presentation.

3 The intent or objectives are evident during the presentation. The scope and sequencing of material are evident during the presentation.

2 The intent or objectives are evident at the conclusion of the presentation. The scope and sequencing of material are evident at the conclusion of the presentation.

1 The intent or objectives for the presentation cannot be determined. There is no evidence of scope or sequencing of material.

2. Prerequisite knowledge recognized

Score

5 Teacher made statement of prerequisite knowledge to the learner. All misinformation was identified and clarified by the teacher.

4 Teacher made some statement about prerequisite knowledge. Misinformation was identified and most was clarified.

3 Teacher alluded to prerequisite knowledge. Some misinformation was identified and some was clarified.

2 Teacher assumed prerequisite knowledge. Little misinformation was identified or clarified.

1 Teacher made no assumption or statement of prerequisite knowledge. No misinformation was identified or clarified.

3. Content at entry level of learner

Score

5 Entry level of learner was validated through teacher questioning and the vocabulary was at the entry level of the

learner or defined by the teacher. Content included a brief review of concepts and principles. Learner questions confirmed same entry level.

4 Entry level of learner was validated through teacher questioning and the majority of vocabulary was at entry level or defined by the teacher. Content review was attempted. Learner questions showed minimal variation from entry level.

3 Teacher attempted to validate entry level through questioning and some of the vocabulary was at the entry level of the learner but little was defined. Content review was not performed. Learner questions showed moderate variation from entry level.

2 Teacher made no attempt to validate entry level and little vocabulary was at entry level with no attempt to define. Content review was not performed. Learner questions showed great variation from entry level.

1 Teacher made no attempt to validate entry level and vocabulary was not at entry level or define. Content review was not performed. Learner questions showed total variation from entry level.

4. Content based on learner needs

Score

5 Teacher determined the entry level of the learner and provided content beginning at that level. Building on the entry level reached the scope of the presentation.

4 Teacher attempted to determine the entry level of the learner and provided content at the approximate entry level. Content showed building on entry level and approached the scope of the presentation.

3 Teacher assumed the correct entry level of the learner and providing content beginning at that level. Content showed some building on that level and approached the scope of the presentation.

2 Teacher failed to assume the approximate entry level of the learner. Content showed some building and some movement toward scope of presentation.

1 Teacher did not attempt to determine or assume entry level of learner. Content showed little building and little movement toward scope of presentation.

5. All content pertinent

Score

5 Teacher digressions were pertinent to the topic and no extraneous material was presented by the teacher. The teacher reestablished the topic at the first appropriate time after a digression.

4 Teacher digressions were appropriate to the topic and little extraneous material was presented by the teacher. The teacher reestablished the topic at some point after each digression.

3 Teacher digressions were appropriate to the topic the majority of times and little extraneous material was presented by the teacher. The teacher reestablished the topic after the majority of digressions.

2 Teacher digressions were inappropriate the majority of times and much of the material was extraneous. The teacher tried but failed to reestablish the topic after all digressions.

1 The teacher digressed and provided extraneous material during the entire presentation. The teacher did not try to reestablish the topic.

6. Appropriate instructional materials used

Score

5 Materials used were appropriate to verbal capacity of learner. Teacher explained relationship of instructional materials to content of presentation and brought specific content areas to learner's attention. Materials were appropriate to content and easily adaptable to environment. Teacher augmented instructional materials by discussion during or after their use.

4 Materials used were appropriate to verbal capacity of learner the majority of time. Teacher explained relationship of instructional material to content of presentation but highlighted few content areas. Majority of material seemed appropriate to content and moderately adaptable to environment. Teacher attempted to augment instructional materials by discussion during or after their use.

3 Materials used were somewhat appropriate to verbal capacity of learner. Teacher attempted to explain some relationship of instructional materials to content of presentation and did not highlight content. Materials were somewhat applicable to content and somewhat adaptable to environment. Discussion during or after use of instructional materials had some significance to those materials.

2 Materials used were moderately inappropriate to verbal capacity of learner. Teacher gave little explanation of relationship of instructional materials to content and did not highlight content. Materials used had little applicability to content and were difficult to adapt to the environment. Discussion during or after use of instructional materials had little relevance to augmenting those materials.

1 Materials used were totally inappropriate to verbal capacity of learner. Teacher gave no explanation of relationship of instructional materials to content and did not highlight content. Materials had no applicability to content and were very difficult to adapt to environment. No discussion during or after use of instructional materials augmented materials.

7. Presentation stimulated two-way participation

Score

5 Teacher allowed and encouraged learner questioning, comments and/or opinions. Teacher elicited verbal responses from learner frequently.

4 Teacher tolerated but did not encourage learner questioning, comments and/or opinions. Teacher elicited verbal responses from the learner some of the time.

3 Teacher discouraged learner questioning, comments and/or opinions. Teacher seldom elicited verbal responses from learner.

2 Teacher ignored learner questioning, comments and/or opinions. Teacher infrequently elicited verbal responses from learner.

1 Teacher cut off and/or did not allow learner questioning, comments and/or opinions. Teacher did not elicit verbal responses from learner.

8. Attention of learner maintained

Score

5 Teacher's tone of voice consistently reflected pleasant and concerned attitude toward learner. Teacher personalized comments and reinforced learner statements throughout presentation. Teacher frequently asked learner's opinion.

4 Teacher's tone of voice frequently reflected pleasant and concerned attitude toward learner. Teacher personalized comments and reinforced learner statements during most of the presentation. Teacher often asked learner's opinion.

3 Teacher's tone of voice occasionally reflected unpleasantness and lack of concern for learner. Teacher attempted to personalize and reinforce some of learner's comments. Teacher asked for learner's opinion some of the time.

2 Teacher's tone of voice frequently lacked pleasantness and reflected lack of concern for learner. Teacher rarely personalized comments or reinforced learner comments. Teacher seldom asked for learner's opinion.

1 Teacher's tone of voice consistently lacked pleasantness or concern for learner. Teacher did not personalize comments or reinforce learner comments. Teacher did not ask for learner opinion.

9. Content presented complete

Score

5 Content presented reached limits of scope and intent stated, all content was pertinent to the topic and all questions and comments by the learner reflected the understanding and knowledge of the content presented.

4 Content presented reached limits of scope and intent stated. Most content was pertinent to the topic and most questions and comments by the learner reflected the understanding and knowledge of the content presented.

3 Content presented approached the limits of scope and intent stated. Some content was pertinent to the topic and some questions and comments by the learner reflected the understanding and knowledge of the content presented.

2 Content presented approached the limits of scope and intent stated. Little content was pertinent to the topic and some questions and comments by the learner sought clarification.

1 Content did not approach limits of scope and intent stated. None of the content was pertinent to the topic. The majority of questions and comments by the learner sought clarification.

10. Teacher attempted to validate learner understanding

Score

5 Teacher encouraged learner critique and questions. Teacher encouraged learner to demonstrate a skill (if taught) and employed an appropriate form of testing.

4 Teacher allowed critique and questions by the learner and allowed the learner to demonstrate skill (if taught). Teacher tried to use an appropriate form of testing.

3 Teacher structured questions to the learner and allowed no learner critique. Teacher structured learner skill demonstration (if taught). Teacher tried to use an inappropriate form of testing.

2 Teacher asked minimal structured questions of learner. Teacher demonstrated skill (if taught). Teacher made minimal attempts to test.

1 Teacher asked no questions and allowed no learner questions or critique. Teacher nor learner demonstrated skill (if taught). No attempt at testing was made.

After observing the patient teaching situation, the following steps are necessary to score the NTRS:

1. Review the competency indicators in this manual for the first competency.
2. Select the group of competency indicators which most closely reflect the nurse's behavior.
3. Record the score (5, 4, 3, 2, or 1) for that group of competency indicators on the line adjacent to the competency on the rating form. Do not use zero.
4. Repeat the process, beginning with Step 1, for the second competency.
5. When all ten competencies are scored, add the scores to obtain a total score. Record the total score in the appropriate location.
6. Compute the mean score (total score/10) and record this score in the appropriate location.

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Title: NURSE REWARD/PUNISHMENT RESPONSES TO DEVIANT AND CONVENTIONAL BEHAVIOR

Author: Munjas, Barbara

Variables: The instrument was designed to measure two sets of variables:

1. Occurrences of (1) stereotyped, deviant role characteristic behaviors (or behaviors commonly observed among persons institutionalized in long-term mental institutions), and (2) conventional role characteristic behaviors.
2. Nurse responses, or rewarding and punishing behaviors defined by the author as follows:

Rewarding behavior—Overt behavior of nursing personnel, things nurses say and do that are positive reinforcement for patient behavior.

Punishing behavior—Overt behavior of nursing personnel, things nurses say and do that are negative reinforcement for patient behavior.

Description:

Nature and Content: This is a structured observation form. On the left are 17 categories of "stereotyped deviant role characteristic behaviors" and eight categories of "conventional role characteristic behaviors." On the right side of the form and beside each category is a column labeled "Reward" and one column labeled "Punish"; the Reward and Punish columns beside each category of behavior are further subdivided into three levels indicated by "A," "B," and "C."

The kinds of rewarding behavior to be indicated by checks beside the letters A, B, and C are:

A—approving statements and actions
B—remunerative behavior
C—takes positive action in response to patient's behavior.

The kinds of punishing behavior to be indicated by checks beside the letters A, B, and C are:

A—disapproving statements and actions
B—imposing a penalty
C—refusing to act or taking negative action in response to patient's behavior.

On the form, examples are provided of "deviant role characteristic behaviors" and "conventional role characteristic behaviors."

Administration and Scoring: The form must be completed by an investigator skilled in the technique of nonparticipant observation and knowledgeable in the area of psychiatric mental health nursing.

Patient-nurse interactions are observed over a predetermined period of time The process to be followed by the rater is (1) observe the patient's behavior, (2) classify the behavior into one of the 25 categories listed on the form, (3) observe the nurse's response to the patient behavior, (4) check the appropriate space on the form to indicate whether the nurse's response was a reward response type A, B, or C, or a punish response type A, B, or C.

Data are tabulated by determining four totals for each patient, i.e., number of times stereotyped deviant behavior was exhibited, number of times conventional behavior was exhibited, number of times the patient's behavior was rewarded, and number of times the patient's behavior was punished.

Development:

Rationale: The instrument is based on the Labeling Theory of mental illness, specifically, the work of Thomas Scheff (Munjas, 1972).

Source of Items: The items are the author's attempt to operationalize two sets of variables derived directly from Scheff's theory: (1) deviant and conventional behavior of mental patients, and (2) the rewarding and punishing responses of nurses.

Procedure for Development: No information was provided.

Reliability and Validity: In a study involving a total observation of 596 nurse-patient interactions which occurred among 74 nurses and 72 patients, 23.5 percent of the interactions were classified by two independent observers. Complete agreement between the classifications of the two observers occurred 92 percent of the time (Munjas, 1972).

Use in Research: Data bearing on the question of whether or not persons in mental institutions are rewarded for playing the stereotyped deviant role and punished for attempting to return to conventional roles were collected in a field study (Munjas, 1972).

Comments: The instrument was developed to test specific hypotheses which were derived from Labeling Theory. Any investigator interested in this approach to understanding mental illness would profit from consulting the theory and the author's work.

The author identified as one instrument problem the fact that:

The form for observation of Conventional Role Characteristic Behaviors contained behaviors that could be viewed as conventional or 'healthy' outside of an institution but were often adaptive responses to the long-term hospital situation or really institutionalized behavior (Munjas, 1972).

Revisions of the form by the author is in process. Initial reliability data are promising, but further validity and reliability work needs to be done. Three suggestions for strengthening the instrument are the following:

1. Labels of the A and C nurse response categories need clarification, e.g., "positive" and "approving" actions are not clearly differentiable.
2. Instructions about timing of observations are needed, since categorization of some behaviors depends upon quantity or persistence over time rather than upon quality.
3. Instructions are needed for categorizing observations which are simultaneously in more than one category, e.g., the patient who masturbates while watching news broadcast, or the nurse who frowns while handing pass permission slip to patient.

References:

Munjas, Barbara. *Labeled deviant behavior: Its reward and punishment in a long-term mental hospital.* Unpublished report, Virginia Commonwealth University, 1972.

______. Labeled deviant behavior in a long-term mental hospital. *Research in Action*, Virginia Commonwealth University, 1975–76 *1* (1), 9–14.

Source of Information:

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Instrument Copyright: None.

Munjas, Barbara

NURSE REWARD/PUNISHMENT RESPONSES TO DEVIANT AND CONVENTIONAL BEHAVIO

Nu_______________

OBSERVATION FORM - STEREOTYPED DEVIANT ROLE CHARACTERISTIC BEHAVIORS WITH EXAMPLES

			Reward	Punish
I	Agitated behavior (restless, pacing wringing hands, unable to sit still, excessive talking)	A		
		B		
		C		
II	Manipulative behavior (attempts to maneuver personnel, patients or ward routine for own advantage)	A		
		B		
		C		
III	Disturbance of speech (not talking, halting, obscure, blocking, repetitive, jumbled)	A		
		B		
		C		
IV	Memory difficulties (confusion, disorientation, makes up stories to fill in gaps)	A		
		B		
		C		
V	Poor personal hygiene (incontinence, disheveled, deteriorated)	A		
		B		
		C		
VI	Suicidal talk or gesture	A		
		B		
		C		
VII	Phobic behavior (persistent, unrealistic fears)	A		
		B		
		C		
VIII	Ritualistic behavior (repeated washing of hands, verbalization of repetitive thoughts)	A		
		B		
		C		
IX	Somatic complaints (headache, backache)	A		
		B		
		C		
X	Talking about illness and symptoms	A		
		B		
		C		
XI	Aggressive behavior (verbal abusiveness and outbursts, violent)	A		
		B		
		C		
XII	Elated behavior (hyperactive, euphoric)	A		
		B		
		C		
XIII	Regressive or infantile behavior (needs feeding or dressing, nude, fetal position, hoarding)	A		
		B		
		C		
XIV	Withdrawn, apathetic, depressed behavior (sits alone, preoccupied, sad, not eating, immobile, slow to respond to directions)	A		
		B		
		C		
XV	Erotic behavior (autoerotic, seductive, exposes self)	A		
		B		
		C		
XVI	Autistic behavior (posturing, staring/trance automatic & undirected, fantasy, stupor)	A		
		B		
		C		
XVII	Hallucinatory & delusional behavior (talks to self or imaginary person, suspicious, grandiose, persecutory)	A		
		B		
		C		

Nu______________

OBSERVATION FORM - CONVENTIONAL ROLES
CHARACTERISTIC BEHAVIORS WITH EXAMPLES

			Reward	Punish
I	Questioning attitude regarding routines, etc. (I'm not sick, I want to go home. What are these medicines for?)	A		
		B		
		C		
II	Asserting autonomy over own behavior (reluctant to or refusing to engage in any routine or activity, such as getting up at a prescribed time, standing in unnecessary lines, etc. Demonstrates self-direction)	A		
		B		
		C		
III	Seeking contact or communication with the world outside the hospital (telephones family, friends, etc., wants radio, newspaper and the privilege to watch television as desires	A		
		B		
		C		
IV	Demonstrates interest in activities beyond those involved in basic physical maintenance (recreation, hobbies, improvement of physical appearance)	A		
		B		
		C		
V	Assuming a leadership role in activities (suggests ward, recreational & occupational activities)	A		
		B		
		C		
VI	Attempting to make contact with the physician or other hospital authority to discuss questions such as own progress or discharge, ward activities or functioning of hospital personnel.	A		
		B		
		C		
VII	Assuming responsibility for others (helping fellow patients and staff)	A		
		B		
		C		
VIII	Engages in expected social amenities (says thank you, asks for cigarettes when available rather than grabbing them, observes common courtesies)	A		
		B		
		C		

CODING INSTRUCTIONS

Rewarding Behavior--operationally, it refers to overt behavior of nursing personnel, things they say and do. A positive reinforcement. Three broad categories of rewarding behavior have been identified.

A. Approving statements and actions. ("That's good," a warm smile.)

B. Remunerative behavior. (Granting favors, extra privileges, prizes, removing some state of punishment.)

C. Takes positive action in response to patient's behavior. (Pays attention to patient, seeks him out, asks his assistance in carrying out ward tasks, shows respect, acts on legitimate requests.)

Punishing Behavior--operationally, it refers to overt behavior of nursing personnel, things they say and do. A negative reinforcement. Three broad categories of punishing behavior have been identified which are antithetical to the above listed rewarding behavior.

A. Disapproving statements and actions. (Correct, chastise, frown)

B. Imposing a penalty. (Lifting or restricting privileges)

C. Refusing to act or taking negative action in response to patient's behavior. (seclusion, restraint, rough or harsh response, ignoring)

Title: PHYSICIAN CHECKLIST

Author: Pienschke, Darlene

Variables: This instrument elicits information on two variables, which, though conceptually distinct, are not named. The first variable deals with how physicians present their diagnosis to patients who have cancer. The second variable involves how physicians give patients who have cancer the prognosis for their disease. (For this review, the former will be called cancer diagnosis approach, and the latter will be called cancer prognosis approach.)

Description:

Nature and Content: The instrument is made up of eight questions which indicate the kind and amount of diagnostic and prognostic information that physicians give to patients who have cancer. *Cancer diagnosis approach* is made up of responses to three items such as "Words used to describe his diagnosis." *Cancer prognosis approach* is made up of responses to five questions such as "Terms used to relate prognosis." The scale used to provide information on these two variables has two possibilities: open, or guarded. A *cancer diagnosis approach* is defined to be "open" if the physician checked such terms as cancer or malignancy in item 1. It is defined to be "guarded" if terms such as lesion or growth are similarly checked. *Cancer prognosis approach* is defined to be "open" if the percent chance of survival or remission is indicated. It is defined to be "guarded" if no such information is provided.

Administration and Scoring: This instrument is to be completed by a physician. A basic assumption is that a physician's response to each patient question regarding diagnosis or prognosis will be open or guarded. (These were defined prior to data collection.) Questions are categorized as pertaining to diagnosis or prognosis, and then responses are categorized as being open or guarded. Directions for categorization of the questions and the responses must be obtained from the author (Pienschke, personal communication, 1976).

Development:

Rationale: The Physician Checklist was developed to obtain information on the relationship between the kind of approach used to give patients information about their disease and how patients feel about their illness and their hospital experiences.

Source of Items: The items contained in the checklist were developed by the author and were based upon a review of the literature and the author's professional experience.

Procedure for Development: No information was provided regarding the development of this instrument other than to indicate that it was given to six physicians to fill out for 32 of their patients.

Reliability and Validity: No information regarding the reliability of these variables was provided.

Two other questionnaires, the Patient Interview Questionnaire and the Nurse Perceptions Questionnaire (Pienschke, 1973) were used in collecting data regarding patients' feelings about the information received, their satisfaction with the care received in the hospital, and nurses' perceptions of patients' responses to the information received from their doctors. The author noted a tendency for patients who received the open approach on cancer diagnosis to: (1) express higher confidence in their physician and nurses, (2) evidence greater satisfaction with the amount and kind of information received from their doctor, (3) indicate greater satisfaction with patient care, and (4) have a greater congruence with nurse perceptions of the needs of patients (Pienschke, 1973). No statistical information is provided that could be used to indicate the probability that such tendencies were likely to be due to chance or random factors.

Use in Research: Pienschke's (1973) use of this instrument, along with her Patient Interview Questionnaire and Nurse Perceptions Questionnaire described elsewhere in this compilation, can be found in the article referenced below.

Comments: The instrument appears to have a potential for providing information about the two variables it is presumed to measure. However, due to the limited number of patients and doctors involved in its development, it is premature to draw any conclusions regarding the ultimate usefulness of the information provided by these two variables. It would be helpful in future research to gather information regarding the extent to which the various items contribute to the score for their respective variables, as well as to determine how each item relates to criterion variables such as patient satisfaction with care and patient knowledge of diagnosis.

Any potential user of this instrument should carefully examine the selection and labeling of the two variables under examination. So, too, must the content of the items be examined in relation to their validity for measuring the variables, e.g., in item 1, the author assumes some of the terms are more acceptable to patients than others, but no evidence was provided for this assumption; in item 3, it is questionable whether the response choices are stated in the best terms.

References:

Pienschke, Sr. Darlene. Guardedness or openness on the cancer unit. *Nursing Research*, 1973, *22* (6), 484–490.

Source of Information:

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Instrument Copyright: Sr. Darlene Pienschke, B.S., M.S.

Pienschke, Darlene

PHYSICIAN CHECKLIST

Check the information that was given to the patient about his diagnosis and prognosis.

1. Words used to describe his diagnosis.

_____ neoplasm
_____ malignancy
_____ lesion
_____ mass
_____ growth
_____ cancer
_____ tumor
Other ______________________________

2. Phrases used in lay men's terms to describe the results of the surgical procedure.

_____ "got it all"
_____ "can't be sure until we get the pathology or laboratory reports."
_____ "we think we got it all but we recommend further treatment."
_____ "there is nothing further we can do."
_____ "we think we got it all, but we can't be sure. We recommend further treatment just in case."
_____ "it spread to other places."
other ______________________________

3. Medical terms used to describe the results of the surgical procedure.

_____ inoperable
_____ localized
_____ nonresectable
_____ metastasized
other ____________________

4. Terms used to relate prognosis.

_____ progressive
_____ incurable
_____ we got it late
_____ advancing
_____ everything looks good
_____ terminal
_____ spread
other ____________________

5. The percent chance of survival indicated.

_____ 0-10%
_____ 10-20%
_____ 20-30%
_____ 30-40%
_____ 40-50%
_____ 50-60%
_____ 60-70%
_____ 70-80%
_____ 80-90%
_____ 90-100%
_____ did not say

6. Percent chance of remission indicated.

_____ 0-10%
_____ 10-20%
_____ 20-30%
_____ 30-40%
_____ 40-50%
_____ 50-60%
_____ 60-70%
_____ 70-80%
_____ 80-90%
_____ 90-100%
_____ did not say

7. Time of life expectancy indicated.

_____ weeks
_____ months
_____ years
_____ did not say

8. At the time the patient was told his condition was there any evidence of metastasis?

_____ yes
_____ no

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Provider-Client Interaction: Client Behavior

Title: PROBLEM BEHAVIOR REPORT SHEET AND CODING TOOL

Author: Bailey, Janet T.

Variable: Patient problem behavior in nursing care settings is the variable under study. Problem behavior is defined as action which deviates from the staff-desired, standing patterns of behavior. Staff-desired, standing patterns of behavior are defined as behaviors which are expected of patients by nurses and presumed to be required to keep the treatment settings running smoothly; the implied harm to the smooth operation of the treatment setting causes the nurse to intervene.

Description:

Nature and Content: The instrument consists of two parts: (1) the observational tool, which utilizes the critical incident technique, is used to collect the data, and (2) the coding section organizes data into descriptive categories and dimensions which can then be analyzed by the use of nonparametric statistics.

The Problem Behavior Report Sheet provides a place for the nurse to check under what conditions the problem behavior occurs (mealtime, bus ride, bedtime, etc.), and which of the following best describes the patient's frame of mind at the time of the incident (completely disorganized, somewhat disorganized, or organized with actions and words coordinated at normal level). The remainder of the sheet is to be used for a verbatim report of the reported behavior.

The Coding Tool lists 10 major categories and dimensions to be coded. They concern the nature of the patient's problem behavior (PB), the nurse's behavioral response (intervention) (I), and the patient's response to the nurse's intervention (PR). Coding instructions are provided.

Administration and Scoring: The instrument was developed for use in a psychiatric inpatient care setting. The observer must know the staff-desired, standing patterns of patient behavior in order to be able to identify problem behavior incidents and factors associated with those incidents.

In the author's study, the instrument per se was not scored; the behavior was categorized and coded.

Development:

Rationale: The instrument is based upon a theory of ecological psychology developed by Barker (1964, 1968), Gump (1964, 1967), and Wright (1967).

Source of Items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: No information was provided.

Reliability and Validity: Reliability of the data-gathering and coding process was checked in two ways: (1) 40 incidents which had been recorded and categorized were rated by two coders; interrater agreement of their results ranged from 0.80 (nursing intervention) to 1.00 (PRN medication used); (2) 48 incidents, observed after collection of data for the Bailey (1974) study had ceased, were recorded and categorized simultaneously by paired observers. Analysis of these data showed interrater agreement from 0.73 (deviance) to 0.90 (problem behavior). The author also stated that there was a high degree of similarity for data from the 48 doubly observed and recorded incidents which did not require coding (Bailey, 1974).

No validity evidence was provided.

Use in Research: The development and use of the instrument is described in Bailey's master's thesis referenced below.

Comments: This instrument provides a beginning scheme for the categorization of nurse-patient interaction. However, in its present form, it forces behavior into preconceived classifications and attends to problem behavior from the nurse's perception only. If expanded, refined, and detailed, the author's procedure could be useful in mapping some of the complicated interrelationships between patient behavior, nurse-patient interaction, and care.

References:

Bailey, Janet. *Problem behavior on a psychiatric unit.* Unpublished master's thesis, University of Kansas, 1974.

Barker, Roger G. *Ecological psychology.* Stanford, California: Stanford University Press, 1968.

Barker, Roger G., and Gump, Paul V. *Big school,* *small school.* Stanford, California: Stanford University Press, 1964.

Gump, Paul V. *Classroom behavior setting: Its nature and relation to student behavior.* Final Report to U.S. Office of Education; Project No. 2453, Contract No. OE4–10,107, 1967.

Wright, Herbert F. *Recording and analyzing child behavior.* New York: Harper and Row, 1967.

Source of Information:

Janet T. Bailey, R.N., M.A.
15519 Pleasant Valley
Houston, Tex. 77062

Instrument Copyright: None.

Bailey, Janet T.

PROBLEM BEHAVIOR REPORT SHEET AND CODING TOOL

Your name ________________________

Date ______________ Approx. time of day of Problem Behavior ________

Patient's name _______________________

__Check the appropriate item below:__

Activity occurring
- Mealtime _____
- Bedtime _____
- Community Meeting _____
- Volleyball _____
- OT _____
- Group Meeting _____
- Bus ride _____
- Freetime _____
- Exercise _____
- Visiting hours _____
- Other _____

__Check the appropriate response for the following question:__

Which of the following best describes how the patient seemed to you at the time of the reported behavior?

_____A. Completely disorganized, his thoughts and actions lacking continuity, out of contact with reality.

_____B. Somewhat disorganized, but with evidence of contact with reality.

_____C. Organized with actions and words coordinated at a normal level.

__Please describe the problem behavior in the order it happened:__

PROBLEM BEHAVIOR CODING TOOL

Description of Problem Behavior Incidents

CODE ______ P.B.

CODE ______ I.

CODE ______ P.R.

CODE ______ I.

CODE ______ P.R.

CODE ______ I.

CODE ______ P.R.

CODE ______ I.

CODE ______ P.R.

CODE ______ I.

CODE ______ P.R.

CODE ______ I.

CODE ______ P.R.

____ High
____ Mod. MANIFEST DEFIANCE
____ Low

____ Yes
THREAT USED
____ No

____ High
____ Mod. HARD-SOFT INTERVENTION
____ Low

____ Yes
PRN MEDICATION GIVEN
____ No

____ Yes
ON-GOING LIMITS SET
____ No

____ Yes
NURSING MOVE PATTERN
____ No

Problem Behavior

This is the patient behavior which the reporting nurse stated was a problem. You will be asked to code these into one of two categories, and the proper subcategory. The categories deal with which kind of "rules" the behavior breaks and therefore is termed "problem behavior."

There are two sets:

I. Violation of Running Rules -- These rules are the ones made to keep things running smoothly on the unit. They are the regime rules.

A. Failure to go to expected setting or activity

Patient fails to go to scheduled activity, meal, etc., tries to go to bed early.

B. Failure to participate in setting's program

Patient enters setting but refuses or fails to participate; e.g., will go to dining room, but won't eat, won't take medications.

C. Attempts to leave setting

Patient attempts to leave setting where he is supposed to be; e.g., won't stay in O.T., attempts to elope.

D. Other generalized setting rule violations

These behaviors are those that seem to violate the running rules but do not seem to fit in above categories. Patient doesn't wear shoes, smokes when against the rules, "makes out" in conference room.

II. Violation of Interpersonal-Social Rules -- These are "rules" that exist to help promote satisfactory interpersonal-social relationships. They are subdivided into two major classifications.

A. Cultural Rules

These are "rules" or "norms" used by the larger society, i.e., the society outside the hospital. These behaviors which break these rules are in two classes.

1. Unusual disturbed behavior -- These are the behaviors which result in a person being hospitalized. These are attempts to hurt self, others -- confused, bizarre behaviors. May be acts usually performed in private, performed publicly, such as undressing in community meeting. It may be a destructive act toward property.

2. Usual disturbed behavior -- These are behaviors that are disturbed, but occur relatively frequently in the "outside" world. They are behaviors such as crying, cursing, being negligent toward property, expressing worry, berating staff.

Intervention

This is the nurse behavior which is the response to the problem behavior of the patient.

I. Gentle supporting behaviors
Nurse listens, comforts, touches gently, stays with patient.

II. Reminding behaviors
These behaviors act as an additional input from the environment. Nurse repeats rule, gets patient's attention, reminds patient of scheduled activity, points out danger to patient from environment, confronts patient with responsibility.

III. Gathering information behavior
Nurse attempts to clarify input from patient, asks questions, assesses.

IV. Encouraging behaviors
No clearly visible force used to change behavior, nurse states she encouraged patient, suggested, there may be evidence of persuasion. Nurse may request that patient change behavior..

V. Forcing behavior
Power clearly used. Direct evidence of force. May be of two kinds:

A. Mechanical power assertion -- nurse uses physical force, environmental manipulation, or self-manipulation. The patient is carried to activities, is locked out of room.

B. Communicative -- nurse threatens, insists, issues directive. Nurse tells patient that unless he goes to OT he will lose his privileges.

VI. Calling for help
Doctor or other staff members called on to help. Not a threat, but genuine call for assistance.

VII. No intervention

Patient Reaction to Intervention

This is the patient behavior which occurs in response to the nurse's intervention. There are four categories.

I. Compliance
Patient goes along with staff immediately. Behavior changes so that it is no longer a problem.

II. Delayed compliance
Patient puts off complying. Delays but then gives in, surrenders without any further intervention. Complies only after a period of non-compliance. Complies, but with evidence of reluctance.

III. Non-compliance
Patient does not change behavior in desired direction. Nurse must intervene again to achieve compliance.

IV. Overcome
Patient is made to comply by physical force. Unwilling to comply.

Total Incident Coding

The following dimensions were devised to measure certain aspects of the entire incident. Within the same incident, there may be several levels of these dimensions. Please code the incident at the highest level reached.

I. High defiance, moderate, low defiance.
This scale measures how defiant patient's behavior was during the entire incident. It asks how much "push" or resistence the patient put into the incident.

A. High -- behavior is quite defiant; patient adamant, quite resistive. Patient elopes or attempts to, refuses to take medication, throws pills on floor, hides, strikes at nurse.

B. Moderate -- behavior is less resistive; more passive, moderately defiant. Patient refuses to take medication, but in orderly fashion. Patient won't talk, but refuses to go to activity, is sarcastic, pulls back when pulled on.

C. Low -- behavior only minimally or not at all resistive; patient minimally defiant. Patient "forgets" to go to activity, wanders down wrong hallway.

II. Hard-soft quality of intervention

This dimension asks how forceful, aggressive, intrusive, punitive or demanding the nurse's behavior was.

A. High -- behaviors which are forceful, aggressive, intrusive, punitive or demanding. Nurse pulls on patient, carries patient to activity, locks patient in room, threatens patient in bold way, physically restrains patient.

B. Moderate -- behaviors which are somewhat forceful, aggressive, intrusive, punitive, or demanding. Nurse tries to persuade patient to go, takes patient's arm, locks room after patient is out, more subtly threatens, reminds patient of possible loss of privileges.

C. Low -- behaviors which are gentle, more passive, less intrusive, non-punitive, not demanding. Nurse requests that patient comply, talks with patient.

III. On-going limits

You will be asked to decide whether or not on-going limits were set, i.e., limits which continued after the problem behavior incident is over, e.g., patient's room is kept locked for two hours, he loses phone privileges for 24 hours.

IV. Threat

You will be asked to decide whether or not threat was used in each incident, e.g., patient is told she cannot eat lunch unless she makes her bed.

V. PRN medication

You will be asked to decide whether or not extra medication was given by the nurse to help patient comply.

Coding Instructions for Problem Behavior Incidents

You will be categorizing problem behavior incidents gathered from a four-week study in two psychiatric in-patient units. Nursing staff during this four-week period recorded every incident of problem behavior they encountered. Problem behavior was described to them as behavior on the part of the patient which causes an interruption in the smooth flowing of business on the floor. It is behavior in which the nurse must intervene or think about intervening. Nursing staff described such behaviors, as well as their actions and the patient's response.

I have taken these descriptions and placed them on a coding sheet for you. The first behavior is labeled P.B. for problem behavior; this is the patient's behavior which initiates the incident. The sheet labeled Problem Behavior contains a description of the categories you will use to code the problem behaviors. This category will be used only one time for each incident. The next behavior is labeled I for intervention. This is the action the nurse takes in response to the patient's initial problem behavior. The sheet labeled Intervention contains a description of the categories you will use to code the nursing staff's actions. The third behavior is labeled P.R. for patient reaction. This is the patient's behavior in response to the nurse's intervention. It deals with whether or not the patient complies. The sheet entitled Patient Reaction to Intervention contains a description of the categories you will use to code the patient reaction behaviors.

On the coding sheet, the intervention (I) and patient reaction (P.R.) codes are repeated one after another down the page. Some incidents will contain many I's and many P.R.'s; others will have only a few I's and P.R.'s to be coded. You are to select the proper category and place its outline number in the blank in front of the described behavior. Only one code may be used for the problem behavior and the patient reaction behaviors. In the case of the nursing intervention, more than one code may be used if you believe there are two (or more) distinctly different interventions present. If it is only one intervention, but you are undecided as to which category, please choose the one you think fits the best.

Dimensions which are designed to measure certain aspects of the total incidents are listed at the bottom of the coding sheet. Descriptions of these dimensions are listed on the sheet entitled Total Incident. You will be rating each incident on each of these dimensions. You will be checking if they are high, moderate, or low.

For statistical analysis, a coding, summarizing all nursing intervention for each incident, was established. This coding was termed a nursing intervention move pattern. The above codings fit into this in the following manner:

A. Pure support move pattern

All incidents which contained no forcing behaviors, and contained one or more gentle supporting behaviors, reminding behaviors, or encouraging behaviors.

B. Pure force move patterns

In this category, an incident could contain no support moves.

1. Verbal force only

Incidents with one or more verbal force moves only.

2. Physical force only

Incidents with one or more physical force moves only

3. Both force (no support)

All incidents with both physical and verbal force moves

C. Mixed move pattern

Incidents coded into this category contained both force and support moves. There are three combinations.

1. Support and verbal force

Incidents with one or more support moves from A, and one or more force moves from B 1 above.

2. Support and physical force

Incidents with one or more support moves from A, and one or more force moves from B 2.

3. Support and both force

Incidents with one or more support moves from A, and one or more moves from B 3.

4. Other generalized setting rules

Incidents containing no force or support moves. They contain only interventions that were coded as Calling for help, No intervention.

Title: NONVERBAL BEHAVIOR WORKSHEET

Author: McCorkle, Ruth

Variables: The worksheet was designed to measure four broad categories of nonverbal patient behavior described by the author as follows:

Facial expressions—any form which the face takes. *Body movements*—any movement or change in position or posture of the body, except for the head. *Eye contact*—any face-to-face contact between the patient and nurse. *General response of patient*—the observer's overall subjective interpretation of the mood of the interaction.

Description:

Nature and Content: The worksheet is an observer-recorded instrument which contains the four categories of nonverbal behaviors described under *Variables.* Each category includes some nonverbal behavior items which are classified as positive, neutral, and negative reactions. For example, items in the category *facial expressions* are grouped under the following classifications: "(1) positive reaction (smiles or laughs, cries, nods head up and down); (2) neutral reaction (blank look, raises eyebrows); and (3) negative reaction (yawns or sighs, frowns, moves head side to side, moans or groans)." Two additional items, "Length of verbalization" and "(General) eye contact" are included.

A column of "Number of Times" and a column of "Total" are provided for recording the observations. The instrument is accompanied by a clearly worded description of each behavior to be observed.

Administration and Scoring: After having become familiar with the descriptions provided for each item in each category of the Interaction Behavior Worksheet, the observer records in the space provided on the instrument form the number of times the behavior occurs.

Each researcher must define the specific conditions under which his(her) data are to be collected, e.g., number of observers, verbal stimulation, length of time for observation, etc. The number of times the described nonverbal interaction behaviors occur are counted and then summed to provide a total number of "positive," "neutral," and "negative" reactions.

Development:

Rationale: Verbal interaction is one of the primary tools a nurse can use in meeting a patient's emotional needs (Hays and Larson, 1963). *Nonverbal* communication has received less attention. In order to study some of the uses and consequences of nonverbal interaction, its manifestations need to be recorded as accurately as possible.

Source of Items: The instrument was based upon Baldwin's Intrusa-Gram Worksheet (McCorkle, 1974).

Procedure for Development: No information was provided.

Reliability and Validity: Some reliability and validity data were provided by McCorkle's study. Based upon two well-trained observers' ratings of 60 seriously ill patients, interrater reliability ranged from 93 percent to 100 percent.

The discriminatory validity of the instrument was demonstrated by its distinguishing between an experimental group of patients ($n=30$) who were touched and verbally stimulated, and a control group who were only verbally stimulated (McCorkle, 1974). The Kolmogorov-Smirnov two sample tests indicated that a significantly greater number of patients in the experimental groups responded positively with facial expressions ($D = 0.17$, $p = <0.01$) and a significantly greater number of control patients responded negatively with their facial expressions ($D = 0.20$, $p = <0.01$). Although no significant difference was found regarding positive body movement responses, significantly more neutral movements ($D = 0.20$, $p = <0.01$) were observed in the experimental subjects as well as significantly fewer negative movements ($D = 0.14$, $p = <0.01$) (McCorkle, 1974).

Use in Research: The worksheet, along with three other instruments (Bales' Interaction Process Analysis, the Postinteraction Questionnaire, and Electrocardiographic tracings), was used in a study of "Effects of Touch on Seriously Ill Patients" (McCorkle, 1974). The sample consisted of 60 seriously ill patients between the ages of 20 and 64, hospitalized on general medical and surgical units in a general teaching hospital in the Midwest.

Comments: The author (McCorkle, 1974) provided the following:

> This investigator would reorganize some of the categories when using this instrument again. There may be no need to have a neutral category in the different responses. 'Crying' may need to be included as a negative response. The gestures such as 'nodding the head' may need to be reclassified or deleted. The 'nervous body movement' category needs to be subdivided

into the type of movement and number of times. The 'eye contact' needs to be refined to measure the length of eye contact by the patient instead of only the fact that eye contact was or was not made.

Any potential user needs to be aware of the following: (1) having the observer in the patient's room introduces a possible source of bias; (2) recording by the observer requires value judgments on the part of the observer. As the author has indicated, both the items and the method of measurement should be refined by any future researcher.

References:

Hays, J. S., and Larson, K. H. *Interacting with patients*. New York: Macmillan Co., 1963.

McCorkle, Ruth. The effects of touch on seriously ill patients. *Nursing Research*, 1974, *23* (2), 125–132.

Source of Information:

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Instrument Copyright: None.

McCorkle, Ruth

NONVERBAL BEHAVIOR WORKSHEET

Number: ____________
Observer: ____________
Time Begun: ____________
Time Ended: ____________

Categories	Number of Times	Total	
Facial Expressions			
Smiles or laughs			Positive Reaction
Cries			
Nods head up and down			
Blank look			Neutral
Raises eyebrows			
Yawns or sighs			Negative
Frowns			
Moves head side to side			
Moans or groans			
Body Movements			
Touches nurse			Positive
*Turns body toward nurse			
*No body movement away or toward nurse			Neutral
*Turns body away from nurse			Negative
Nervous body movements			
Eye Contact			
Looks at nurse			Positive
Closes eyes			Neutral
Looks away from nurse			Negative
General Response of Patient			
*Seems interested			Positive
*Seems indifferent			Neutral
*Seems rejecting			Negative

Length of verbalization: __________ minutes, __________ seconds
Eye contact: (to be scored by investigator) ____ yes ____ no
*To be scored only once.

I. Facial Expressions: any form which the face takes. The face is an affect display system which is more informative about the nature of an emotion than the body (whether the stimulus person appears to feel angry, afraid, sad, etc).[1]

Smiles or Laughs: a facial expression involving a brightening of the eyes and an upward curving of the corners of the mouth with or without a sound that may express pleasure or amusement.

Cries or Tears: an act of shedding tears in which the patient shows a spontaneous indication of relief or demonstrates expressions of feeling better after a period of tension.[2]

Nods head up and down: a gesture in which the position of the head is changed vertically to express or emphasize ideas in conjunction with verbal expression. "Includes giving specific signs of attention to what the other is saying as he goes along, as a means of encouraging him to say what he wishes, by nodding the head, saying, 'I see,' 'Yes,' 'M-hmn.'"[3]

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[1] Paul Ekman and Wallace V. Friesen, "Head and Body Cries in the Judgement of Emotion: A Reformulation," Perceptual and Motor Skills (1967), p. 712.

[2] Robert F. Bales, Interaction Process Analysis (Cambridge, Massachusetts: Addison-Wesley, Inc., 1951), p. 179.

Blank look: an empty look without any expression.

Raises eyebrows: to lift the arch or ridge over the eye, also lifting the hair growing on the ridge.

Yawns or sighs: to take a deep breath with or without the jaws widespread as an involuntary reaction to fatigue or boredom. Included when behavior "indicates to the observer that the actor is unattentive, bored, or psychologically withdrawn from the problem at hand, such as yawning."[4]

Frowns: to contract the brow or a wrinkling of the brow as in displeasure or as an indication of intolerance.[5]

Moves head from side to side: a gesture in which the position of the head is changed horizontally to express or emphasize ideas in conjunction with verbal expression.

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[3] Bales, p. 180.

[4] Bales, p. 195.

[5] Bales, p. 192.

Moans or groans: to utter a low prolonged sound of grief or pain: or a deep inarticulate and involuntary sound abruptly begun and ended. Included as an indication of distress, discomfort, fatigue or pain.[6]

II. Body Movements: any movement or change in position or posture of the body, except for the head. The body shows the patient's adaptive efforts regarding affect, which is more informative than the face about the intensity of an emotion.[7]

Touches nurse: to come in contact physically with the nurse. Included as an indication that the actor is attracted to the other.[8]

Turns body toward nurse: changes or moves body in direction of the nurse.

No body movement away or toward nurse: no change in position; no motion of any part or of the body as a whole.

Nervous body movements: rapid, repeated motions with the hands, fingers, feet, face, shoulders, head, or body, such as the tapping of fingers or squirming.

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[6] Bales, p. 195.

[7] Ekman and Friesen, p. 712.

[8] Bales, p. 177.

III. Eye Contact: face to face contact between the patient and nurse.

Looks at nurse: focusing one's eyes in the general direction; that is, facing the nurse; watching the nurse attentively.[9]

Closes eyes: shuts eyelids for a longer period than five seconds.

Looks away from nurse: focusing one's eyes in another direction than that facing the nurse.

IV. General Response of Patient: the observer's overall subjective interpretation of the mood of the interaction.

Seems interested: to share, participate, or to become involved with the interaction.

Seems indifferent: to show a lack of interest; unconcerned or unfeeling; to be unmoved, apathetic, or resigning.

Seems rejecting: to be unwilling to share, participate, or become involved with the interaction, a refusal. "Includes any behavior in which the actor appears to be provoked, in which he shows annoyance, irritation, heat, anger, rage, or has a temper tantrum."[10]

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[9] Bales, p. 180.

V. Length of Verbalization: the time from which the nurse signals the observers to begin by pulling on her left ear lobe to the time the nurse leaves the patient's bedside.

VI. Eye Contact to be Scored by Investigator: direct visual contact between the nurse and patient in which there is eye to eye contact with each other during at least half the interaction.

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[10] Bales, p. 195.

Title: ACTING-OUT CHECKLIST

Author: Shoffner, Mildred

Variable: The instrument was designed to identify acting-out behavior of hospitalized adolescent patients. Acting-out is defined as "an infraction of hospital rules which the adolescent has prior knowledge of, verbal abuse of a staff member, the infliction of physical pain or injury to himself(herself) or to another person on the hospital unit, or destruction of any physical property of the hospital unit itself."

Description:

Nature and Content: This is an observer-completed, modified checklist which contains two items directly related to acting-out behavior (type of behavior and precipitating factors), one item which seeks a narrative description of the acting-out incident, and six items of patient and observer demographic data. Item 5, "type of acting-out," lists, essentially, the components of the definition of acting-out listed above under *Variable.* Item 6, "precipitating factors to the incident," lists 12 possible causes. More than one factor may be checked in response to this item.

Administration and Scoring: The checklist can be completed by any professional staff member of a health care facility, though it was designed primarily for use of nursing staff. Anyone completing the instrument must be able to read at the high school level and must have some insight into causes of behavior.

Directions for completion accompany the checklist, and more than one checklist may be completed on an incident when more than one staff member either observes the incident or is directly involved in the incident. Each checklist requires approximately 5 minutes to complete.

The instrument itself is not scored.

Development:

Rationale: The instrument is based upon the theories and concepts of adolescence of Blos (1962), Erikson (1959), and Josselyn (1971).

Source of Items: The items were derived from a review of the literature and the author's experience with adolescent psychiatric patients.

Procedure for Development: The author developed an early version of the instrument and pretested it in a small university-affiliated psychiatric hospital and in a large religious-affiliated general hospital, both of which had psychiatric units that included psychiatric adolescent patients. As a result of the pretest and followup interviews with participating staff who had completed a total of 16 checklists, the instrument was revised to its present form.

Reliability and Validity: No interrater reliability data were available.

Content validity of the instrument is based upon (1) its having been reviewed by the author's dissertation advisory committee and six psychiatric-mental health nurses, each of whom held at least a master's degree, (2) the source of the items identified above, and (3) a pretest of the instrument.

Use in Research: Shoffner developed the instrument for use in her dissertation research now in progress. She is using it along with an instrument developed by Rudolph Moos. The purpose of her study is to gain more knowledge about adolescent patients who break hospital rules of which they have prior knowledge, verbally abuse staff members, inflict physical pain on themselves or another person in the hospital unit, or destroy physical property of the hospital unit itself.

Comments: The instrument appears to have potential for eliciting the kind of data Shoffner seeks. More information on the instrument's strengths and weaknesses should be available upon Shoffner's completion of her research.

References:

Blos, Peter. *On adolescence.* New York: The Free Press, 1962.

Erikson, Erik. The problem of ego identity. *Psychological Issues, 1* (1), 1959.

Josselyn, Irene. *Adolescence.* New York: Harper Row, 1971.

Source of Information:

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Instrument Copyright: None.

Shoffner, Mildred

ACTING-OUT CHECKLIST

DIRECTIONS:

Please complete a Checklist each time you, yourself, observe an incident of acting-out by a patient and each time you are actually involved in an incident of acting-out by the patient. More than one Checklist may be completed on an incident when more than one staff member either observes the incident or is directly involved in the incident. Always record your own personal opinion of the incident.

Please complete this form as soon after the incident as possible and always before you report off duty from the shift on which the incident took place. If additional space is needed for a written explanation of any answer, please write the word OVER at the end of the unfinished statement. Then turn the page over, record the number of the question to which you are responding and then complete your explanation.

Each Checklist takes approximately five minutes to complete.

ACTING-OUT:

is an infraction of hospital rules which the adolescent has prior knowledge of, verbal abuse of a staff member, the infliction of physical pain or injury to himself/herself or to another person on the hospital unit, or destruction of any physical property of the hospital unit itself.

PLEASE CHECK ONLY ONE ANSWER FOR EACH OF THE FOLLOWING CATEGORIES:

1. Patient's sex: F ☐ M ☐

2. Patient's age: 12-14 yrs. ☐
15-17 yrs. ☐
18-21 yrs. ☐
Other, please identify ____________________

3. Day of week: Mon. ☐
Tues. ☐
Wed. ☐
Thurs. ☐
Fri. ☐
Sat. ☐
Sun. ☐

4. Shift: 7-3 ☐
3-11 ☐
11-7 ☐
Other, please identify ____________________

5. Type of Acting-out: Broke hospital rules ☐
Verbally abusive to staff ☐
Hurt self (Burned skin, cut self, banged head) ☐
Hurt another patient ☐
Hurt a staff member ☐
Destroyed hospital property ☐
Other, ☐
Please explain: ____________________________________
____
____

6. Precipitating Factors to the Incident: (check as many as necessary)

Intrapsychic factors ☐*

Irritating behavior of another patient ☐

Broken promise by MD or other staff member ☐

Broken promise by parent or significant other ☐

Competing with other patients for attention ☐

Significant date (birthday, holiday) ☐

Other, ☐
Please explain: ____
____

Staff not available to give attention to the patient ☐

Nothing to do ☐

Authoritarian attitude of staff members ☐

Inconsistent rules ☐

Scheduled activity or appointment not kept ☐

Visiting hours ☐

7. Please describe the acting-out incident briefly in your own words:

____
____
____
____

8. Your Job Title ______________________________

9. Today's date ______________________

*Intrapsychic factors are factors existing within the individual's mind.

Provider-Client Interaction: Quality of Care (Process)

Title: RUSH-MEDICUS NURSING PROCESS METHODOLOGY

Authors: Haussmann, R. K. Dieter, Hegyvary, Sue T., and Newman, John F.

Variable: The quality of nursing care as it can be measured by an assessment of the nursing process is the variable. The nursing process is defined as the assessing, planning, implementing, and evaluating components of care. The nursing process, as operationalized by this instrument, is a comprehensive set of nursing activities performed in the delivery of patient care.

Description:

Nature and Content: This methodology for evaluating the quality of nursing care consists of a master set of 257 evaluative criteria. These criteria are grouped within a framework of six major objectives and 28 subobjectives:

1.0 The plan of nursing care is formulated.
  1.1 The condition of the patient is assessed on admission.
  1.2 Data relevant to hospital care are ascertained on admission.
  1.3 The current condition of the patient is assessed.
  1.4 The written plan of nursing care is formulated.
  1.5 The plan of nursing care is coordinated with the medical plan of care.
2.0 The physical needs of the patient are attended.
  2.1 The patient is protected from accident and injury.
  2.2 The need for physical comfort and rest is attended.
  2.3 The need for physical hygiene is attended.
  2.4 The need for a supply of oxygen is attended.
  2.5 The need for activity is attended.
  2.6 The need for nutrition and fluid balance is attended.
  2.7 The need for elimination is attended.
  2.8 The need for skin care is attended.
  2.9 The patient is protected from infection.
3.0 The nonphysical (psychological, emotional, mental, and social) needs of the patient are attended.
  3.1 The patient is oriented to hospital facilities on admission.
  3.2 The patient is extended social courtesy by the nursing staff.
  3.3 The patient's privacy and civil rights are honored.
  3.4 The need for psychological-emotional well-being is attended.
  3.5 The patient is taught measures of health maintenance and illness prevention.
  3.6 The patient's family is included in the nursing care process.
4.0 Achievement of nursing care objectives is evaluated.
  4.1 Records document the care provided for the patient.
  4.2 The patient's response to therapy is evaluated.
5.0 Unit procedures are followed for the protection of all patients.
  5.1 Isolation and decontamination procedures are followed.
  5.2 The unit is prepared for emergency situations.
6.0 The delivery of nursing care is facilitated by administrative and managerial services.
  6.1 Nursing reporting follows prescribed standards.
  6.2 Nursing management is provided.
  6.3 Clerical services are provided.
  6.4 Environmental and support services are provided.

The criteria are stated in objective, measurable terms, usually with dichotomous answers, and sources of information have been identified for each criterion. For medical, surgical, and pediatric nursing, the methodology has been developed to apply to four categories of patients, i.e., self-care, partial care, complete care, and intensive care. Additional categories of patients currently included are patients in the recovery room and in the normal newborn nursery.

Administration and Scoring: The methodology is operationalized by use of observation worksheets. These worksheets contain grouped subsets of criteria from the master list, and the criteria have been selected to be relevant both to a specific patient type and representative of all criteria in the master list that might apply to a specific patient type. Printed worksheets of computer-selected criteria based on patient type are available.

The worksheets have been designed to be completed by trained observers. Workshops to train observers and to establish an acceptable level of inter-observer reliability must be provided. The authors indicated that at the end of a 2- to 3-day training session, most observers achieved better than 90 percent agreement on completed worksheets. Any potential user must be aware of the need for planned, systematic assessment of interrater reliability of the observers, and a level of 85-percent agreement is suggested.

The methodology is applied to a nursing unit by reviewing 10 percent of 1 month's patient census, usually about 20 patients. Observations should be randomly distributed across patients, days, and day and evening shifts.

Specific patients are randomly selected from the unit census just prior to observation and rating. Once these patients have been identified, their illness classification is noted and the appropriate observation worksheets are selected and completed by the trained observer. A total of 30 to 50 minutes is required to complete each worksheet; of this time, approximately 5 to 10 minutes is devoted to patient interview. Information is obtained from a total of eight sources, and the recommended sources of information for each criterion are indicated on the worksheet.

All completed worksheets are visually scanned for completeness, keypunched, and entered into a computer program for editing. A second computer program then produces quality indexes for each of the 28 subobjectives for each of the monitored units. Each index is the average of the criterion scores within the subobjective. Each criterion score is the ratio of positive responses to the maximum possible positive responses based upon the number of valid observations for the criterion. All of the computer programs are coded in ANS COBOL and may be operated on any medium-sized computer which can run the routine.

Development:

Rationale: This system resulted from an attempt to develop a methodology that (1) would be patient-centered, (2) was process-oriented in terms of activities that comprise the nursing process, (3) would permit correlation of various aspects of nursing processes as well as correlation of processes with structural and outcome measures, and (4) would extract the most relevant and useful parts of existing methodologies so that a more specific and comprehensive instrument could be developed and tested.

Source of Items: The items were based on an extensive, in-depth examination of studies and instruments that addressed measurement of the quality of nursing care, as well as on the professional experience of the project advisory committees and staff.

Procedure for Development: An initial set of 900 items was developed and examined for measurability and redundancy. This led to a revised list of approximately 200 items. Additional items which focused specifically on patient care were added. From this effort, a set of 220 criteria was developed for use with medical, surgical, and pediatric units. The criteria were used in a study which included two hospitals. Based upon the results of that study, the criteria were revised, expanded, and field tested with 19 hospitals in various locations in the United States. These hospitals were selected to test the reliability and validity of the methodology in a wide range of types and sizes of hospitals.

Data from this 18-month study in the 19 hospitals were statistically analyzed in detail and some changes in the criteria list resulted. Changes in the criteria list did not substantively affect the subobjective measures themselves. Only criteria which had not contributed information to scores during one 3-month period (January through March) were eliminated, and care was taken not to change the substantive meaning of those criteria which were reworded as a result of the analysis.

Reliability and Validity: The reliability and validity of the methodology are treated extensively in the references cited below. That information is presented here in brief summary only.

The authors found in the pilot study in two hospitals that inter-observer reliability coefficients of 0.90 were usually attained at the end of a 2- or 3-day orientation workshop. For the field study in 19 hospitals, an interobserver reliability coefficient of 0.85 was reported.

To further test the reliability of the methodology, data obtained from the 19 hospitals were submitted to item analysis, redundancy analysis, cluster analysis, and polytomous-item analysis.

Content validity was established on the basis of the sources of the items identified above, i.e., extensive literature review, examination of preexisting instruments, an outside panel of experts, advisory groups of nurses, and the professional experience of the authors.

The claim for construct validity is based upon two types of data: (1) an analysis of the scores obtained from the 19 hospitals showed that differences in the quality scores were highly predictable in terms of prevalent concepts and practices of nursing, and (2) current trends in nursing education and practice led to the hypothesis that components of the nursing process should be highly correlated in terms of quality. Analysis of quality scores from the 19 hospitals showed the presence of a high degree of such correlation ($p < 0.001$).

As the authors pointed out, evidence of concurrent validity is difficult to assess because of the lack of comparable methodology for comparison. However, subjective assessments of the quality of nursing care made by key nursing personnel in the study hospitals did not disagree with the quality scores which resulted from analysis of reported data.

Limited data regarding predictive validity for the methodology are based upon three specific instances, each of which pertain to a different study hospital. In one hospital, the extended illness and hospitalization of the head nurse of a unit resulted in a predictable decrease in scores during her absence, and increase in scores following her return. In a second hospital, a comprehensive inservice program on one unit gave continued attention to the nursing process. Significant improvement in the unit's care was expected to be reflected in higher scores for that unit's quality scores, especially on subobjective 1.4. Analysis of data showed a significant improvement in scores from March to April to May. A third hospital used the instrument to evaluate the effects of specific organizational and staffing changes made on two units. These units were matched with control units for comparison. It was expected that quality scores would rise significantly on the experimental units. This expectation was substantiated by data.

Use in Research: The development and use of the instrument are described in detail in Jelinek et al. (1974), and in Haussmann et al. (1976).

Comments: This methodology represents careful and impressive attention to conceptual framework, detail, planning, testing, and evaluation. As one of the most widely tested, most thoroughly analyzed methodologies available for measuring the quality of nursing care at this time, it can make a significant contribution to the nursing profession. It may also be the most expensive in terms of resources. Any potential user must be cognizant of the costs and make his(her) own decisions regarding the cost versus benefits which would result from use of this methodology.

Because of the length of the instrument and the accessibility of the references cited, the criteria master list is not reproduced in this compilation.

References:

Haussmann, R. K. Dieter, Hegyvary, Seu T., and Newman, John F. *Monitoring quality of nursing care, Part II: Assessment and study of correlates* (DHEW Publication, No. (HRA) 86–7). Washington, D.C.: Department of Health, Education, and Welfare, 1976.

Hegyvary, Sue T., and Haussmann, R. K. Dieter. Monitoring nursing care quality. *Journal of Nursing Administration*, 1975, *5* (5), 17–26.

———. Nursing professional review. *Journal of Nursing Administration*, 1976, *6* (9), 12–16.

———. The relationship of nursing process and patient outcomes. *Journal of Nursing Administration*, 1976, *6* (9), 18–21.

———. Correlates of the quality of nursing care. *Journal of Nursing Administration*, 1976, *6* (9), 22–27.

———. Field testing the nursing quality monitoring methodology: Phase II. *Nursing Research*, 1976, *25* (5), 324–331.

Jelinek, Richard, Haussmann, R. K. Dieter, Hegyvary, Sue T., and Newman, John E. *A methodology for monitoring quality of nursing care* (DHEW Publication, No. (HRA) 76–25). Washington, D.C.: Department of Health, Education, and Welfare, 1974.

Source of Information:

U.S. Department of Health, Education, and Welfare
Public Health Service
Health Resources Administration
Bureau of Health Manpower
Division of Nursing
Hyattsville, Md. 20782

Instrument Copyright: None.

Title: CHECKLIST FOR EFFECTIVENESS, EFFICIENCY, AND SAFETY OF NURSING CARE

Authors: Lindeman, Carol A., and Stetzer, Steven L.

Variable: This instrument is designed to measure the combined aspects of effectiveness, efficiency, and safety of nursing care with respect to surgical patients.

Effective nursing care is operationally defined as nursing care that produces the desired result. *Efficient nursing care* is operationally defined as nursing care that produces the desired result with a minimum of effort, expense, or waste. *Safe nursing care* is operationally defined as nursing care that leaves the patient free from any preventable damage, danger, or injury.

Description:

Nature and Content: The instrument is a 30-item checklist. Response alternatives are "yes" or "no." Each item describes a specific fact or procedure involved with aspects of nursing care. The items are all worded in such a way that a "yes" response indicates better care and a "no" response, poorer care. Examples of the items are: "I was informed of the patient's allergies before I had to provide care to the patient"; and "The proper solution for skin preparation was ready."

Administration and Scoring: The checklist can be completed by the nurse providing care for the surgical patient. It can be completed quickly. The nurse simply checks the appropriate response next to each item on the form.

The total score is the sum of all items checked "no." Therefore, a higher total score is indicative of poorer care.

Development:

Rationale: No specific theory is referred to. The purpose of developing the instrument was to provide an appropriate means of assessing effectiveness, efficiency, and safety of nursing care relevant to a research project.

Source of Items: The original items came from a review of the relevant literature, contributions from nursing and operating room personnel, and the authors' past experience.

Procedure for Development: During a pilot study, an initial list of 54 items was evaluated and reconstructed. The reconstruction was accomplished by having an operating room staff evaluate the items in terms of clarity, independence, generality, and whether choices on items could be made based on overt evidence. The original set of 54 items was reduced to the 30-item checklist.

Reliability and Validity: Interrater reliability was determined by first having the circulating nurse complete the checklist for each patient, and then having the operating room supervisor review it. No quantitative measure was reported.

Content validity was established by having the checklists reviewed by two clinical experts.

Use in Research: This instrument was developed and used in conjunction with a study by Lindeman and Stetzer (1973) entitled "Effect of Preoperative Visits by Operating Room Nurses." It was used as a measure of nursing care with 176 surgical patients. The study was designed to test several of the effects of having an operating room nurse visit the preoperative patient. It was found that those adult patients visited received significantly better care as measured by this instrument.

Comments: This instrument seems to be one of potential value as a self-administered measure of nursing care relative to the surgical patient. It has the advantage of simplicity and brevity.

Further explorations into the reliability and validity of this tool are in order, as are further applications. The combination of effectiveness, efficiency, and safety of nursing care should be considered. One might want to determine whether these concepts represent subsets of the checklist or predictors of a single construct. The relative importance of each item should be considered, as should the possibility of rater bias.

It should be noted that the items on the instrument reflect the potential impact of nursing care during the preoperative period on nursing care during the interoperative period; other aspects of effective, efficient, and safe interoperative nursing care are not covered.

Finally, the items are worded in such a way that every "yes" response relates to good care, and anyone who has completed the tool once may mark "yes" to all of the items during subsequent administrations without thoughtfully considering the item content each time.

References:

Lindeman, C. A., and Stetzer, S. L. Effect of preoperative visits by operating room nurses. *Nursing Research*, 1973, *22* (1), 4–16.

Source of Information:
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Instrument Copyright:
The American Journal of Nursing Company
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New York, N.Y. 10019

Lindeman, Carol A., and Stetzer, Steven L.

CHECKLIST FOR EFFECTIVENESS, EFFICIENCY, AND SAFETY OF NURSING CARE

		YES	NO
1.	The patient's name, as it appeared on the surgery scedule, was correct. If it was changed, who changed it? ____________________	___	___
2.	I was informed of the patient's personal preferences.	___	___
3.	I knew the patient's allergies before I had to provide care to the patient.	___	___
4.	Because of the information provided me, I was able to modify my interpersonal relationships with the patient to account for his (her) individual differences.[1]	___	___
5.	Information about the patient was shared with other members of the surgical team prior to surgery (cooperation).	___	___
6.	I was able to carry out my nursing care responsibilities with minimal frustration.[1]	___	___
7.	Information necessary to position the patient safely, securely and comfortable was available to me before the patient entered the room.	___	___
8.	Drapes were satisfactory.	___	___
9.	Adequate support was provided when the patient was transferred from the cart to the table.	___	___
10.	Tubes, catheters or I.V.'s were not dislodged or accidentally removed during transfer.	___	___
11.	Information necessary to transport the patient from his hospital room to the Operating Room in a safe, secure and comfortable manner was available before personnel left for the patient.	___	___
12.	Recovery room personnel were informed of the patient's allergies before he (she) entered the recovery room.	___	___
13.	Recovery room personnel knew if and which family members were waiting in the Family Room.	___	___
14.	There was an adequate number (neither too few nor too many) instruments.	___	___
15.	Instruments were of the correct size.	___	___
16.	Instruments were of the correct type.	___	___

17. The proper solution for skin preparation was ready. ___ ___

18. Accessories necessary for safe and comfortable positioning of patient were ready and conveniently located. ___ ___

19. Drains, tubes and catheters were available and conveniently located. ___ ___

20. The proper type and amount of dressings were ready. ___ ___

21. The proper type of tape for the dressing was ready. ___ ___

22. Adequate physical restraints were available. ___ ___

23. The correct surgical site (right or left limb, etc.) was prepared. ___ ___

24. The identification band was secured in a suitable place. ___ ___

25. The operating room permit was accurate, complete and consistent with the schedule. ___ ___

26. Special consent forms were accurate and complete. ___ ___

27. Preoperative preparation of the operating room was completed before the patient was transferred to the operating room table. ___ ___

28. Preoperative preparation of the patient (exams, x-rays, lab work, etc.) was completed before the patient was transferred to the operating room table. ___ ___

29. Electrical equipment was properly placed and grounded. ___ ___

30. Patient was properly grounded when electrical equipment was used. ___ ___

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[1] These questions were not used in the data analysis, as answers could be based on opinion rather than on overt evidence.

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Title: EVALUATION OF PATIENT CARE

Authors: Ostrowski, Carol, and Routhier, R. Wilda

Variable: The quality of nursing care in a hospital setting is the variable under study.

Description:

Nature and Content: This instrument collects data which encompasses both direct and indirect patient care elements. It is to be completed by a specially trained nurse-interviewer who records observations and comments from the patient, patient's family, and nursing staff, as well as data from the patient's records over the period of time of the hospital stay.

One hundred of the items are inquiry, observation, and health record audit items. Seven open-ended questions are also used to elicit comments from the patient regarding any aspect of his(her) hospitalization.

Components of *direct* patient care recorded by the instrument include the admissions procedure, hospital environment and patient's experience therein, management of the psychosocial aspects of his(her) care, and discharge planning and assistance given the patient and his(her) family.

Elements of *indirect* patient care include immediate and long-range nursing care plans made for the patient by the nursing staff.

Administration and Scoring: Completion of the entire instrument requires from 1 to 1½ hours over a period of time from admission of the patient until his(her) discharge. Arranging a time to meet with the family of the patient and completing the interview before discharge proved to be problems in the pilot study (Routhier, 1972).

The interviewer needs basic interviewing skills, and practice with the questionnaire prior to administration.

Scoring procedures for the instrument were not provided.

Development:

Rationale: In keeping with the movement throughout the country toward identification and improvement of the quality of health care, directors of hospital nursing services are striving to reorganize their departments of nursing so as to "free the nurse to nurse" and to concentrate on quality nursing care (Schwier and Ardella, 1970). This instrument was devised for determining the quality of nursing care actually being received by patients in a medical center hospital as a step in the reorganization of its nursing services.

Source of Items: Items came from suggestions of professional and technical nurses on a committee chosen to develop the questionnaire, as well as from Beland (1965) and a National League for Nursing publication (1966).

Procedure for Development: A review of the literature was undertaken, and forms and methods used by other agencies were reviewed by the committee for guidelines. Over a period of 2½ years, overall areas of the instrument have remained the same, but some component parts have been added, deleted, and/or refined.

Reliability and Validity: Routhier (1972) states that, because of the length of the questionnaire, the multiple questions asked under each category, and the size of the sample obtained, plus the special training of the interviewers, reliability of the tool is presumed. No specific data were provided.

To establish the validity of the items, three lay persons and three nurses were asked to review the instrument.

Use in Research: The use of the tool in a pilot project in a large teaching hospital is described by Routhier (1972) in the reference cited below.

Comments: In its present form, much of the instrument is devoted to patients' perceptions of care and, as such, more nearly constitutes a patient satisfaction instrument. As an instrument for the evaluation of the quality of patient care, it warrants psychometric attention. The variable should be more clearly conceptualized, operational definitions should be specified, and a quantifiable scoring system should be developed. Some of the items should be refined and reworded; in their present form, many of them require value judgments. An item analysis or a cluster analysis might show that some of the items are tapping the same dimension; this overlap could be eliminated, which would result in a shorter instrument yet unaltered in value. To measure quality of care, it would also seem that more specific input from the nurses would be warranted.

References:

Beland, Irene. *Clinical nursing.* New York: Macmillan, 1965.
National League for Nursing. *Quest for quality.* New York: National League for Nursing, 1966.
Routhier, R. Wilda. Tool for the evaluation of patient care. *Supervisor Nurse,* January 1972, 17–27.

Schwier, Mildred, and Ardella, Frances. Identifying the need for change in nursing service. *Nursing Outlook, 18* (4), April 1970, 56–62.

Source of Information:
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Instrument Copyright:
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Ostrowski, Carol, and Routhier, R. Wilda

EVALUATION OF PATIENT CARE

CODE 0 = No
1 = Yes
2 = Inapp.
3 = Letter Code

Subject # : ________
Unit & Rm.: ____________
Age: ________
Primary Dx: ________________
Secondary Dx: ________________
Sex: ______________

Observer	Column #	1st Interview - NURSE INTERVIEWER	Code Ans	Comment
		Initial Admission		
		Route of Admission		
	1	Admitting Office		
	2	Emergency Room		
		Previous Admissions		
	3	MCHV		
	4	Other		
	5	None		
		Does the Admission Note include:		
Description - any mention not quality	6	Degree of illness		
	7	Patient's state of mind		
	8	Allergies		
Inapp. if none	9	Indication of limitation		
Omit 10 + 11 if no WRITTEN procedure		Admission Interview There is an Admission Interview method established for this Unit.		
Ask T.L.	10	Was the patient interviewed using this procedure?		
	11	Does the Nursing Care Plan reflect information gathered from the Admission Interview?		
		Patient Safety		
Inapp.	12	Is the bell cord within the patient's reach?		
If none	13	Are physical limitations accommodated for?		
	14	Does the Nurse have unobstructive access to the patient?		
	15	Is the room odor free?		
Observe only on scheduled visits.		2nd Interview		
	16	If comatose is the patient's privacy maintained?		
Adm. Date - Disch. Date -		Length of hospital stay		
	17	0 - 2 days		
	18	3 - 8 days		
	19	9 days or more		

Observer	#	1st Interview - PATIENT	Ans	Comment
		Initial Admission		
	20	Did the length of time, from your arrival at the hospital to your bed on the Nursing Unit seem reasonable?		
If the answer to #20 is NO		What did you feel was the delay?		
	21	Insufficient staff in Admitting		
If the answer to #20 is YES, mark 21 - 29 inapp.	22	Many people to be admitted		
	23	Patients not admitted in the order of arrival		
	24	No one to transport patient to the Unit		
	25	Unit not ready for admission		
	26	Many patients in emergency		
	27	Long wait for doctor in emergency		
	28	Delay in other departments		
Write in comments	29	Other		
	30	Can you tell the difference between the graduate/(R.N.) nurses, LPN's and Aides here?		
If the answer to #30 is YES	31	Were you seen by an R.N. when you arrived on the nursing unit?		
Inapp. for private room	32	When you arrived on the unit, did someone - introduce you to your roommate		
	33	explain the bell cord to you		
	34	explain the intercom to you		
	35	show you how to operate the bed		
PO. special diet	36	explain your hospital diet to you		
	37	explain what activity you would be allowed		
	38	explain bathroom privileges to you		
	39	Do you know who the Team Leader coordinating your care is?		
	40	Is the temperature of your room comfortable		
	41	Are your articles arranged conveniently for you		
		1st Interview - NURSE		
Team Leader or Head Nurse		Initial Admission		
		Do you know the patient's -		
	42	bowel habits at home		
	43	sleeping habits at home		
Verify religion from chart	44	What is the patient's religion? (Does the Nurse know the patient's religion)		

Observer	#	2nd Interview - PATIENT	Ans	Comment
		Hospitalization		
By name or sight, or either	45	Do you know which staff member is caring for you today?		
-50% No. 51-100%	46	Do you feel your privacy has been maintained?		
Lead choices		Do you feel you are getting satisfactory explanations for the things that are being done for you here in the hospital?		
	47	Always		
	48	Usually		
	49	Seldom		
	50	Never		
Indicate who, others inapp.		Was the explanation given by a:		
	51	Doctor		
	52	Nursing Staff (RN, LPN)		
	53	Other		
		Were the results of special tests/procedures reported to you?		
	54	Always		
	55	Usually		
	56	Seldom		
	57	Never		
Any procedure done in O.R. indicate type in comments.	58	Did a Nurse come in the day before you went to the Operating Room, and discuss with you how you would be made ready for surgery?		
58, 59, 60 inapp. if patient did not have surgery.	59	Did she also discuss the care you would receive following surgery?		
If the answer to #59 is YES	60	Do you feel this talk make your surgery and post-operative period easier?		
Close as possible to discharge		Discharge Planning		
	61	Do you feel you are ready to go home?		
If the reply to #61 is NO	-	In what way do you not feel ready to leave?		
		Do you feel that the Nurses are friendly?		
	62	Always		
	63	Usually		
	64	Seldom		
	65	Never		

Observer	#	2nd Interview - NURSE	Ans	Comment
Check chart	67	Hospitalization Do you know the type of work the patient does?		
	68	Does the patient need financial assistance? (Does the Nurse know?)		
	69	Do you feel this patient is getting satisfactory explanations for the things being done for him in the hospital? Always		
	70	Usually		
	71	Seldom		
	72	Never		
	73	Nurse does not know		
74 & 75 inapp. if patient did not go to O.R.	74	Before this patient went to surgery did a Nurse go in and discuss his preparation with him?		
	75	Did you also discuss the care he would receive after surgery?		
	76	Discharge Planning Is there anything to be considered in readying this patient for discharge?		
If the reply to #76 is YES	-	What is it that you are considering?		
	77	Do you feel this patient is emotionally and physically ready to go home?		
If the reply to #77 is NO	-	In what respects do you feel he is not ready?		

Observer	#	2nd Interview - PATIENT cont'd	Ans	Comment
Call bell	66	Do you feel your light has been answered within a reasonable length of time?		
If the reply to #66 is NO	-	What do you feel caused the delay?		
	-	What pleased you most during your hospital stay?		
	-	What did you dislike most about your hospital stay?		

Observer	#	Indirect Patient Care - NURSE INTERVIEWER	Ans	Comment
		Nursing Care Plan		
(A.D.P. Card 2)		Is a written care plan developed for the patient -		
	1	within 24 hours		
	2	by the 4th day		
	3	upon discharge		
Specific - check within 24 hrs.	4	Does the care plan include immediate plans and approaches?		
Specific		Does the care plan include long term plans and approaches?		
	5	by the 4th day		
	6	upon discharge		
(App. 80%) 24 hours		Was most of the care plan written by a -		
	7	Nurse		
	8	Student		
4th day	9	Nurse		
	10	Student		
Discharge	11	Nurse		
	12	Student		
Within 24 hours	13	Are immediate methods of carrying out approaches identified?		
		Are long term methods of carrying out approaches identified?		
	14	by the 4th day		
	15	upon discharge		
		FAMILY		
24 hours	16	Did the Nurses ask you for any information which might assist them in caring for (Patient's name)?		
4th day		Do the NURSES discuss with you the care that is being given to (Patient's name)?		
	17	Always		
	18	Usually		
	19	Seldom		
	20	Never		
Upon Discharge	21	Have the Nurses discussed with you any question you may have regarding (patient's name) discharge?		
	22	Do you feel (Patient's name) is ready to go home?		
Upon Discharge If the reply to #22 is NO	-	In what respect do you feel he is not ready?		

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Title: THE PHANEUF NURSING AUDIT

Author: Phaneuf, Maria C.

Variables: Quality of nursing care, as it can be evaluated by information based on seven nursing functions that serve as criteria, is the focus of the instrument. The seven criteria are: application and execution of physicians' legal orders; observation of symptoms and reactions; supervision of the patient; supervision of those participating in care; reporting and recording; application and execution of nursing procedures and techniques; promotion of physical and emotional health by direction and teaching; and an overall rating of the quality of nursing care. Use of these criteria, as indicated in the method for their use, yields an overall rating of the quality of nursing care and a quality rating with regard to each criterion.

Description:

Nature and Content: This rater-completed instrument consists of 50 items designed to evaluate the quality of nursing care received by patients in any setting in which professional nursing is a major service, as that care is reflected in the patient care records of the health care facility. The items focus primarily on the nursing process rather than on other domains such as outcome or structure.

Application and execution of physicians' legal orders is operationalized by responses to six items such as "medical diagnosis complete." *Observation of symptoms and reactions* consists of six items such as "vital signs." *Supervision of the patient* is operationalized by seven items such as "nursing care plans changed in accordance with assessment." *Supervision of those participating in care* consists of four items such as "support of those giving care." *Reporting and recording* is operationalized by five items such as "facts on which further care depended were recorded." *Application and execution of nursing procedures and techniques* is made up of 16 items such as "fluid balance plus electrolytes." *Promotion of physical and emotional health by direction and teaching* is made up of responses to six questions such as "emotional support to patient." The total score is operationalized by responses to all 50 items.

Administration and Scoring: The instrument was designed to be used by members of an audit committee. In order to use it, the rater must examine a randomized sample of available patient care records for patients who have been discharged from the health care facility. The instrument was not designed for use while the nursing care is in progress. The author noted that the instrument should be used only after nursing, supervisory, administrative staff, and other persons professionally involved in patient care are well aware of its nature and purpose. Once a decision to use the instrument has been made, the author stated that a committee must be established to carry out the procedures required to complete the instrument.

Approximately 40 hours are required to train raters how to complete the instrument. Following training, approximately 30 minutes are required for each patient chart review.

The author recommends that for health care agencies discharging 50 or fewer patients per month, the instrument be completed for all such patients. If the number of patients discharged per month is greater than 50, it is recommended that the instrument be completed for a random sampling of 10 percent of the patients discharged each month.

Scores are computed for each variable by adding up the numerical weights provided for the respective group of questions. The score for *application and execution of physicians' legal orders* is based on items 1–6; *observation of symptoms and reactions* is based on items 7–12; *supervision of the patient,* on items 20–23; *reporting and recording,* on items 24–28; *application and execution of nursing procedures and techniques,* on items 29–44; *promotion of physical and emotional health by direction and teaching,* on items 45–50; and the total score is the sum of the responses to all 50 items. A 3- or 4-point scale is used to record responses to the questions. The numerical code assigned to a particular response ranges from 0–7, depending on the question. Scores for each of the variables can range from 0–42, 0–40, 0–28, 0–20, 0–20, 0–32, 0–18, and 0–200, respectively. Since it is possible that responses to certain questions may be missing, provision is made for adding to the score for a given measure depending on how many items had no response. The total score is defined to have five divisions so that a score from 0–40 means "Unsafe," 41–80 means "Poor," 81–120 means "Incomplete," 121–160 means "Good," and 161–200 means "Excellent Quality."

Development:

Rationale: This instrument provides patient-centered information that could be used to evaluate the quality of nursing care received by patients in any setting in which professional nursing is a major service.

Source of Items: The items used in the instrument and the procedures associated with its use were developed in collaboration with hospital nurses, public health nurses, and other health professionals who were interested in assessing the quality of health care provided to patients. A model of the nursing process developed by Berggren and Zagornik (1968) provided part of the conceptual framework used in the instrument's development.

Procedure for Development: The development of the instrument is described in Phaneuf's *The Nursing Audit* (2nd ed.) (1976).

Reliability and Validity: No information was provided with regard to the test-retest, interobserver, or generalized split-half reliability characteristics of the variables measured.

The instrument was initially used on a pre and post basis in an acute general hospital, an accredited public health agency, and in a nursing home that was certified as an extended care facility. The sample consisted of 50, 32, and 20 cases randomly selected from these three institutions, respectively. The results were used to discuss apparent problems and to develop procedures, which it was presumed would remediate at least some of the problems identified. Six months later, the instrument was used on similar samples of randomly selected patients' charts. No statistical information was provided regarding the observed changes. However, the results suggest considerable improvement occurred in the expected direction.

Use in Research: This instrument and/or an adaptation of it have been widely used in nursing research. The potential user should consult *Index Medicus.*

Comments: This instrument appears to have a potential for providing information on the variables it was developed to measure.

It would be helpful to have some information on the test-retest and interobserver characteristics of the variables measured by this instrument, although it is recognized that each audit committee must establish its own interrater reliability coefficients for its particular setting. It would also be helpful to have information on the inter-item and between-variable characteristics of these measures. Such information would not only help confirm the current assignment of items to variables, but could suggest alternative groupings that might provide even more useful information than the current variables appear to provide. When this type of information is derived, it is important not to assign a numerical value to a response category such as "does not apply" or to missing data. Rather, it would be useful to develop a coding and scoring scheme so that only actual data were used to develop a score on a given variable.

Because of its length and its accessibility, the instrument is not included in this compilation.

References:

Berggren, H. J., and Zagornik, A. D. Teaching nursing process to beginning students. *Nursing Outlook,* 1968, *16,* 32–35.

Phaneuf, Maria C. *The nursing audit: Profile for excellence.* New York: Appleton-Century-Crofts, 1972.

______. *The nursing audit* (2nd ed.). New York: Appleton-Century-Crofts, 1976.

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Instrument Copyright:

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Medical Division
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Title: QUALITY PATIENT CARE SCALE (QUALPACS)

Authors: Wandelt, Mabel A., and Ager, Joel

Variable: The quality of nursing care being received by a patient in any setting where nurse-patient interactions occur is the variable being measured.

Description:

Nature and Content: This is a 68-item instrument designed to be completed by an observer-rater. The items are arranged into six categories with item distributions and definitions as follow:

Category I Psychosocial: Individual—actions directed toward meeting psychosocial needs of individual patients (15 items).

Category II Psychosocial: Group—actions directed toward meeting psychosocial needs of patients as members of a group (8 items).

Category III Physical—actions directed toward meeting the physical needs of patients (15 items).

Category IV General—actions directed toward meeting either psychosocial or physical needs of the patient or both at the same time (15 items).

Category V Communication—communication on behalf of the patients (8 items).

Category VI Professional Implications—care given to patients that reflects initiative and responsibility indicative of professional expectations (Wandelt and Ager, 1974) (7 items).

Each item is to be rated by placing a check in the appropriate space on a 5-point rating scale, and any item may be rated more than once during an observation period. The standard of measurement is the care expected of a first-level staff nurse who holds state licensure (Wandelt and Ager, 1974).

Rating choices are "best care," "between," "average care," "between," and "poorest care." There are also spaces to indicate "Not Applicable," and "not observed." Items are coded #D, *I, or #D/*I as a point of reference for the observer and indicate which items require direct observation, indirect observation, or either of these.

Administration and Scoring: The instrument was designed to be used by trained observer-raters. Guidelines and instructions for observer-raters have been developed, as well as a 20-page Cue Sheet which provides several concrete examples of activities illustrative of each item. Adjunct materials, e.g., instructions for use of the information face sheet, definitions of levels of care, etc., also add to the instrument's usability.

For any single evaluation project, the authors recommend that at least two nurses be trained to use the scales and to rate the care. The authors stated:

> Observer-raters are usually comfortable and used the scale reliably after observing and rating four or five patients, or at the end of two days of tryouts and discussions (Wandelt and Ager, 1974).

Measurement of the quality of care received by one patient requires 3 hours of the observer-rater's time—2 hours of direct observation and 1 hour of learning about the patient, assessing nursing needs, and completing ratings in retrospect following the period of observation.

After an observer-rater has completed the observations and ratings, a score is calculated. Each check representing best care is given a value of 5; between best care and average care = 4 points; average care = 3 points; between average care and poorest care = 2 points; poorest care = 1 point.

The score for each item is the average of the ratings in all of the cells of the item. The total mean score is the measure of the quality of the nursing care received by the patient and must be calculated from the total of the item mean scores, not by averaging the six single subsection mean scores.

Development:

Rationale: In the authors' opinions, the Slater's Nursing Performance Rating Scale was so effective and widely usable for measuring competencies displayed by a nurse as she(he) cares for patients that they decided it might be possible to rephrase that instrument's items and construct an instrument that could serve equally well to measure the quality of the care received by a patient (Wandelt and Ager, 1974).

Source of Items: The items were based on those of the Slater Nursing Performance Rating Scale (1967).

Procedure for Development: The items of the Slater scale were rephrased to construct an instrument for measuring the quality of nursing care. The new scale was pretested in three hospitals in the Detroit area in 1969. The pretesting determined that many of the items were appropriate and usable but that others were not. A revised scale was constructed from a combination of the usable items converted from the Slater scale and the addition of some new items.

During 1970, the new instrument was tested by faculty members of the College of Nursing, Wayne State University. Guidelines for use of the scale were written during the 1970–71 academic year.

Reliability and Validity: Evidence of interrater agreement is based on three studies. In a study conducted at Harper Hospital, Detroit, 96 patients drawn from 21 wards were observed by four pairs of raters who were faculty members of Wayne State University Nursing College. Raters were assigned in pairs, and these pairs were randomly assigned to patients. Each patient was observed continuously for 2 to 2½ hours by the pairs of raters who recorded their ratings independently. The intraclass correlation for the 96 patients was $r=0.74$.

A second study was conducted at a Midwestern university hospital. The intraclass correlation for six patients observed in the same manner as the Harper Study was $r=0.91$.

The third set of data was obtained in connection with a cancer care project conducted in a Detroit area hospital. The data are based upon ratings of the care of nine patients, each observed by three raters, and the care of two additional patients observed by a single pair of raters. The interclass correlations was $r = 0.64$ for the 11 patients.

To obtain a Kuder-Richardson estimate of reliability, 88 observations from the Harper study were used. Item, subscale, and total score variance and covariance were computed for the 55 items of the 68 which had been rated for at least 20 patients. The obtained Kuder-Richardson reliability was 0.96.

Some evidence of stability reliability was collected in the Harper study, also. Five patients each were rated by one observer on 2 successive days based on 2 hours' continuous observation. The correlation of the ratings between days was $r=0.98$.

Observer-raters who used Qualpacs and four clinical nurse specialists judged the instrument to have content and construct validity for measuring the quality of patient care.

An investigation of concurrent validity was based on Harper Hospital data. Eight supervisors and directors were asked to rank-order the 21 wards of the hospital in terms of the quality of care provided for patients on the ward. The average rank-order correlation was $r=0.24$. Using the Spearman-Brown formula, the reliability of the ward ranks averaged across the eight judges was estimated to be 0.56. The rank-order correlation between average ward ranks and average ward Qualpacs scores was $r=0.44$. Corrected for attenuation, i.e., for unreliability of the average ward ranks using 0.56 as estimated reliability, the correlation between ward ranks and Qualpacs was $r=0.52$ (Wandelt and Ager, 1974).

Use in Research: Qualpacs and/or adaptations of it have been widely used in quality of patient care research. A potential user should consult the *Index Medicus* for published references.

Comments: The problem of subjectivity on the part of the observer and the possibility of bias introduced by having an observer present while a nurse provides care for a patient, must be taken into consideration when contemplating use of this instrument. Some of the terms and items require value judgments on the part of the observer even though the Cue Sheet does provide some guidelines.

Because of copyright restrictions, the instrument is not included in this compilation.

Further psychometric development might show that the number of items could be shortened without altering the instrument's value or, perhaps, a shorter period of observation could produce data of equal value.

References:

Slater, Doris. *The Slater nursing competencies rating scale.* Detroit: Wayne State University, 1967.

Wandelt, Mabel A., and Ager, Joel. *Quality patient care scale.* New York: Appleton-Century-Crofts, 1974.

Wandelt, Mabel A., and Stewart, Doris (Slater). *Slater nursing competencies rating scale.* New York: Appleton-Century-Crofts, 1975.

Source of Information:

Mabel A. Wandelt, R.N., Ph.D.
College of Nursing
University of Delaware
Newark, Del. 19711

Instrument Copyright:

Wayne State University
School of Nursing
Detroit, Mich. 14828

Title: SLATER NURSING COMPETENCIES SCALE

Authors: Wandelt, Mabel A., and Stewart, Doris Slater

Variable: Actions performed by nursing personnel as they provide care for patients is the variable assessed.

Description:

Nature and Content: This is an 84-item observer-completed rating scale. The items are arranged in six categories with item distributions and definitions as follows:

Category I Psychosocial: Individual—actions directed toward meeting psychosocial needs of individual patients (18 items).

Category II Psychosocial: Group—actions directed toward meeting psychosocial needs of patients as members of a group (13 items).

Category III Physical—actions directed toward meeting physical needs of patients (13 items).

Category IV General—actions that may be directed toward meeting either psychosocial or physical needs of patients, or both at the same time (16 items).

Category V Communication—communications on behalf of patients (7 items).

Category VI Professional Implications—care given to patients that reflects initiative and responsibility indicative of professional expectations (17 items).

Each item is to be rated by placing a check in the appropriate space on a 5-point rating scale, and any item may be rated more than once during a rating period. The standard of measurement is the quality of the performance expected of a first-level staff nurse (Wandelt and Stewart, 1975).

Rating choices are "best nurse," "between," "average nurse," "between," and "poorest nurse." There are also spaces to indicate "not applicable" and "not observed."

Administration and Scoring: The instrument was designed to be used by trained observer-raters. Guidelines and instructions for observer-raters were developed as well as a 20-page Cue Sheet, which provides several concrete examples of activities illustrative of each instrument item.

Before attempting to use the scale, the observer-rater must familiarize himself(herself) with the scale, the cues, the guides for use, etc. The authors recommend that the rater then attempt a retrospective evaluation of a nurse whose work the rater has observed. Persons report that they spend an average of from 3 to 3½ hours on this first evaluation (Wandelt and Stewart, 1975). The second use of the Slater Scale requires approximately 2 hours. Following the second trial evaluation, a rater is usually ready to undertake real ratings. By the time four subjects have been rated, a rater can usually complete each retrospective rating in approximately 30 to 40 minutes.

Each rater develops his(her) own frame of reference to serve as a yardstick against which to measure competence displayed by a nurse performing nursing care activities (Wandelt and Stewart, 1975).

The responses and their numeric values are as follows: best nurse = 5 points, between = 4 points, average nurse = 3 points, between = 2 points, and poorest nurse = 1 point.

An individual nurse's score is derived by totaling the scores of all items rated and dividing by the number of items rated (carrying to one decimal point). When multiple ratings are ascribed to an item, a mean score should be calculated for that item. This obtained mean then becomes the score used when summing the scores of all items rated. Thus, the final evaluation score may be a mean of the scores for all rated items or the mean of the mean scores of all rated items.

Ratings of 60 of the 84 items are sufficient to provide a valid and reliable score (Wandelt and Stewart, 1975). Detailed instructions for use and scoring of the scale are contained in the Wandelt and Stewart (1975) reference cited below.

Development:

Rationale: The instrument was developed to provide reliable, quantitative measurements of 84 criteria that could be used to measure absolute, not relative, clinical nursing performance (Wandelt and Stewart, 1975).

Source of Items: The items contained in the instrument were based upon a review of the literature and the professional experience of the authors.

Procedure for Development: In developing the instrument, the authors worked with faculty members of the Centralized Instructional Program for Psychiatric Nursing at Wayne State University College of Nursing, as well as personnel in four hospitals in the Detroit and Grand Rapids, Michigan, areas.

Reliability and Validity: Interrater reliability was based upon pairs of observer-rater scores for 74 senior nursing students who had completed 12 weeks of clinical experience. The students were divided into three groups according to the identification of the raters themselves. The number of students rated by a given pair of raters ranged from one to seven. The interclass correlation for the 74 student nurse ratings was 0.77.

Intercorrelations among items, scales, and total scores were computed for a sample of 250 diploma nursing students who had completed 8 weeks of psychiatric experience in clinical settings. Slater Scales were filled out retrospectively by the clinical instructors. The odd-even, split-half reliability was 0.98.

The data relevant to the stability reliability of the scale were based on ratings of 103 staff nurses at the Veterans Administration Hospital in Little Rock, Arkansas. Nurses were rated on the Slater Scale initially, and again 6 months later. The *r* on total Slater ratings for the 6-months interval was 0.60.

Content validity was established by having the items examined intensively and repeatedly by nurse practitioners and nurse educators. One such examination was conducted by clinical instructors (at least two from each specialty area) who devoted 6 to 10 hours or more each week to the process for 10 weeks.

Predictive validity is evidenced by the correlation of the Slater Scale scores with the following:

Instructor clinical experience grades	$r = 0.72$
Instructor theory grades	$r = 0.63$
NLN Achievement scores	$r = 0.54$
Social Interaction Inventory scores	$r = 0.69$

Among the early testing of the instrument was examination of data from three sets of 57 student nurses each. Seven instructors rated each student of each set every 2 weeks for five 2-week intervals. In each of these situations, the mean scores for the students were significantly higher each 2 weeks. These findings indicate that the instrument is sufficiently sensitive to measure learning that takes place in a 2-week period of clinical experience.

Additional details of the reliability and validity of the instrument are contained in the reference cited below.

Use in Research: The authors report that the instrument has been used by 400 raters to perform 6,000 ratings of 1,500 subjects in 20 health care agencies and 50 patient care settings. The interested reader should consult the *Index Medicus* for published reports of use of the instrument.

Comments: The Slater Nursing Competencies Rating Scale can provide valuable information. Anyone interested in the evaluation of nursing actions should give the scale careful attention.

The problem of subjectivity on the part of the observer and the possibility of bias introduced by having an observer present while a nurse provides care for a patient, must be taken into consideration when considering use of an instrument such as this. Some of the terms and items require value judgments on the part of the observer, even though the Cue Sheet does provide some guidelines.

Any potential user must consider the subjective judgments its use entails and the expense involved in terms of expertise, time, and other resources.

Because of copyright restrictions, the instrument is not included in this compilation.

References:

Wandelt, Mabel, and Stewart, Doris Slater. *Slater nursing competencies rating scale.* New York: Appleton-Century-Crofts, 1975.

Source of Information:

Mabel A. Wandelt, R.N., Ph.D.
College of Nursing
University of Delaware
Newark, Del. 19711

Instrument Copyright:

Appleton-Century-Crofts
Medical Division
Prentice-Hall, Inc.
292 Madison Avenue
New York, N.Y. 10017

Title: CLIMATE OF NURSING HOME EVALUATION INSTRUMENT

Authors: Woog, Pierre, and Goldman-Jacks, Elaine

Variables: This instrument elicits information on 15 variables as they pertain to nursing homes and nursing home patients: resources, cue richness, fostering achievement, fostering dependency, recognition, stimulation, fostering affiliation, tolerance of deviancy, warmth, individualization, fostering autonomy, physical attractiveness, groups, and interagency communication. The 15th variable was not named, but it was operationalized as the total score of all the items contained in the instrument.

Description:

Nature and Content: This observation-interview guide consists of a very large number of items that provide information about a wide variety of situations and characteristics likely to involve or affect patients in a nursing home. The instrument is divided into three major components, i.e., observation of the facilities, observation of residents, and staff interview items. The variables are operationalized by responses to various subgroups of questions contained in the instrument. *Resources* is operationalized by responses to questions such as "Do residents have to serve on any committees?" *Cue richness* is operationalized by responses to questions such as "Are rules, instructions, and regulations or various do's and don'ts posted on walls and bulletin boards (beyond 'No Smoking' and 'Exit' signs)?" *Fostering achievement* is measured by responses to questions such as "Do the residents help out by taking care of each other?" *Fostering dependency* is operationalized by questions such as "How do residents go about getting the things they need like stamps, toothpaste, shoelaces, etc.?" *Recognition* is operationalized by responses to questions such as "Can you give me a specific example (incident) of one patient helping another?" *Stimulation* is made up of responses to items such as "View from windows—Appeal." *Fostering affiliation* is made up of responses to items such as "Availability of social spaces." *Tolerance of deviancy* is made up of items such as "suicidal attempts," "destructiveness," "threats to others," etc. To each of these items the respondent is to rate the behavior as (1) intolerable; resident would have to move if that behavior were displayed; (2) resident could stay but the home would try to put a stop to the behavior; or (3) tolerable; "that's to be expected" (Woog, p. 124).

Warmth is operationalized by responses to questions such as "Are any of . . . [the residents'] ideas about changes practical?" *Individualization* is operationalized by responses to questions such as "I wonder if you could take just a few minutes to tell me what kinds of people live here. It's hard to tell just from looking around. What are they like?" *Fostering autonomy* is made up of questions such as "Do residents ask you if they can go shopping for things they need like clothing or shoes?" *Physical attractiveness* is operationalized by responses to questions such as "Condition of building exterior." *Groups* is made up of responses to questions such as "Are any classes offered to residents (a series of meetings on some topic intended for education of some sort)?" and, *Interagency communications* is operationalized by responses to questions such as "Do your older residents have jobs of any kind outside [in the community]?" Varying numbers of categories are provided to record responses to each of the questions.

Administration and Scoring: The instrument is to be completed by trained observer-interviewers. Instructions for administering this instrument are provided as part of the instrument. No information is provided regarding any type of training required for the observer-interviewers other than to indicate that role-playing techniques are employed as part of the training procedures. No scoring instructions are provided other than to indicate that the score for each variable is the sum of the responses to the respective subset of questions contained in the instrument. A total score is obtained by summing the answers to each of the individual questions.

Development:

Rationale: The instrument was developed to provide information that could be used to assess and to help improve the mental health status of nursing home residents.

Source of Items: An instrument developed by Slover (1969) was the primary source of the items.

Procedure for Development: The authors modified and added to Slover's (1969) original set of questions.

Reliability and Validity: Reliability of the instrument was assessed by the test-retest procedure. For a total of 45 nursing homes, the reliability coefficient was 0.63.

The instrument was used to evaluate the impact of mental health training programs for nursing home workers. The instrument detected no significant differences as a result of the training programs for any variable except the total score. This result, while barely significant (t=1.76, $p < 0.05$, one-tail-test, N=27), was replicated in a second set of data available for 18 facilities. In addition to showing a significant difference in the total score, it also showed significant differences for 9 of the 14 other variables (t=6.470, $p < 0.05$, N=18).

Use in Research: This instrument was developed and used in a study designed to evaluate the effects of a staff-training program upon the residents and staff of 30 nursing homes on Long Island, New York (Goldman and Woog, 1975).

Comments: The instrument appears to have potential for providing information on some of the variables it is presumed to measure. However, because of the limited information available, it is premature to draw any firm conclusions with respect to its ultimate usefulness.

It would be helpful to have information on the test-retest and interobserver reliability characteristics of the variables measured by this instrument. Given that the instrument is very long, an item analysis might show that it could be shortened without altering its potential. It is possible that a variety of patterns may be present in the questions that are not apparent or congruent with the way the items are currently being combined into scores. The fact that the total score did indicate a possible significant difference in the predicted direction suggests that some of the questions may be sensitive to efforts to improve staff-resident relations. However, the potential of such items may be clouded by their inclusion with a much larger set of questions which has no such potential.

Because of its length, the instrument is not included in this compilation. It may be obtained from the authors.

References:

Goldman, Elaine, and Woog, Pierre. Mental health in nursing homes training project, 1972–1973. *Gerontologist*, 1975, *15*, 119–124.

Slover, Darrell. *Relocation of long-term geriatric patients.* Unpublished doctoral dissertation, University of Chicago, 1969.

Woog, Pierre. Evaluation report of National Institute of Mental Health. #HSM42-72-218, *Training project on mental health in nursing homes, 1972–1973.* Hempstead, New York: Hofstra University, 1973.

Woog, Pierre, and Goldman, Elaine. The utilization of educational research in an allied field. *Evaluation*, 1975, *2* (2), 78–80.

Woog, Pierre, and Pidal, Joseph. Evaluation report of National Institute of Mental Health, #HSM42-72-218, *Training project on mental health in nursing homes, 1973–1974.* Hempstead, New York: Hofstra University, 1974.

Source of Information:

Elaine Goldman-Jacks, R.N., M.S.
Programs on Aging
Adelphi University
Garden City, Long Island, N.Y. 11530

Instrument Copyright: None.

Provider-Client Interaction: Provider's Perception of Client

Title: CHARACTERISTICS OF PATIENTS WHOM NURSES RECALL POSITIVELY AND NEGATIVELY

Author: Blaylock, Jerry N.

Variables: The instrument is designed to measure selected characteristics of hospitalized adult medical-surgical patients. The kinds of characteristics included are: (1) patient's background (demographic), (2) medical diagnosis, (3) appearance, including disfigurements, and (4) socially undesirable behaviors and characteristics.

Description:

Nature and Content: This is a self-administered instrument. Part I consists of 12 items of respondent demographic data. Part II consists of 21 items of information descriptive of an adult medical-surgical patient to whom the nurse had a negative response. As used in the author's study, these same items are presented to ascertain whether patients to whom nurses had positive responses had similar characteristics. A description of positive and negative nurse responses is included in the instrument. The response format of the items varies, and many of the items have multiple parts. For example, item 17 of Part II asks the respondent to indicate disfigurations via checking prelisted items and then asks for verbal descriptions of the disfigurations. Item 21 of Part II is a checklist of 43 socially undesirable patient characteristics or behaviors.

Administration and Scoring: The instrument is self-administered; instructions for completion of each item are on the instrument itself. As indicated above, the response format varies, dependent upon the kind of information sought. The author reports that approximately 30 minutes are required to complete the questionnaire.

No information regarding scoring, per se, was provided by the author. However, the reference cited below should be consulted for information as to how she scored the instrument for the purposes of her study.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: Items were based upon a review of literature and the author's professional experience.

Procedure for Development: No information was provided.

Reliability and Validity: Procedures usually used to assess reliability and validity were not employed. The author stated that the reliability of the instrument was assessed via a cross-validation design and that content validity was established by a search of relevant professional literature and a pilot study to determine recurring patient behaviors.

Use in Research: The development and use of the instrument is reported by Blaylock in the reference cited below. The instrument, as modified by Rickelman (1971) and used with psychiatric patients, is described elsewhere in this compilation.

Comments: The instrument is in early stages of development; reliability and validity studies are needed, and further analysis may suggest that some items could be eliminated which would shorten the instrument, yet not alter its usefulness.

References:

Blaylock, Jerry N. *Characteristics of nurses and of medical-surgical patients to whom they react positively and negatively.* Unpublished doctoral dissertation, Teachers College, Columbia University, 1970.

Rickelman, Bonnie. *Characteristics of nurses and psychiatric patients to whom they react positively and negatively.* Unpublished doctoral dissertation, Teachers College, Columbia University, 1971.

Source of Information:
Jerry N. Blaylock, R.N., Ed.D.
1700 Red River
Austin, Tex. 78701

Instrument Copyright: Jerry N. Blaylock, R.N., Ed.D.

Blaylock, Jerry N.

CHARACTERISTICS OF PATIENTS WHOM NURSES RECALL POSITIVELY AND NEGATIVELY

The following questionnaire is divided into three parts. The first part requests information about your own background. The second and third request information about two specific adult medical-surgical patients with whom you have had contact. Specific directions for the last two parts are given at the beginning of those sections.

It is hoped that you will answer the questions as completely as possible. Though some of the questions are of a highly personal nature, they are important for validity of this study. Your responses will remain totally anonymous. Please do not write your name anywhere on the questionnaire. Neither you nor the hospital where you work will be identified in the study.

Most of the questions require only short answers or checks. Be sure to read the questions completely and carefully before answering. Please answer every question.

Part I. About you and your background

1. Your age in years on your last birthday: Under 21( ) 21-25( ) 26-30( ) 31-40( ) 41-50( ) 51-60( ) 61 or over( )

9. Title most nearly descriptive of your present position (check one)

   Staff nurse( ) Head nurse( ) Assistant head nurse( )

   Supervisor( )

10. Length of time in your present position (check one):

    Under 12 months( ) 12-23 months( ) 24-35 months( )

    3-5 years( ) 6-9 years( ) 10-19 years( )

    20 or more years( )

11. Number of years of nursing experience since graduation:

    ____

12. Your educational background (check and complete appropriate blanks):

(✓)		Major in:
___	Hospital diploma--when granted?_____	__________
___	Associate degree--when granted?_____	__________
___	Credits toward baccalaureate degree--number?_____	__________
___	Baccalaureate degree--when granted?_____	__________
___	Credits toward master's degree--number?_____	__________
___	Master's degree--when granted?_____	__________
___	Credits toward doctoral degree--number?_____	__________
___	Doctoral degree--when granted?_____	__________

Part II. About the first patient

It is inevitable that we meet an occasional person to whom we react negatively. The nurse is not immune to this and sometimes reacts negatively to a given patient. This reaction may take the form, for example, of dislike, annoyance, irritation, anger, repulsion or physical or emotional aversion.

Think back until you remember such a patient--one to whom you experienced a physical or mental reaction which was negative. Be sure that the patient is an adult medical-surgical patient (any age from 15 years on). After recalling this specific patient, answer the following questions in relation to this patient.

Please be sure to respond to every item. If you are not sure of the answer, give your best guess, indicating that it is your "best guess" by putting a question mark after the answer.

1. How long ago did you encounter this patient?

   A month or less( ) 2-12 months( ) 13 months-4 years( )
   5-9 years( ) 10-14 years( ) 15 years or more( )

2. What was your professional relationship to this patient? (Check one.)

   ( ) Staff nurse responsible for direct care
   ( ) Head nurse on the unit where patient was located
   ( ) Supervisor of the unit where patient was located
   ( ) Other, please specify ______________________
   ____

3. Patient's age: 15-19( ) 20-25( ) 26-30( ) 31-40( )
   41-50( ) 51-60( ) 61-70( ) Over 70( )

4. Patient's sex: Male( ) Female( )

5. Patient's race: ______________________

6. Patient's religion: Catholic( ) Jewish( ) Protestant( ) None( ) Don't know( ) Other, please specify

____

7. What is the patient's country of origin? (If American, please indicate ancestry, e. g., Irish, Italian, etc.)

_________________________ Don't know( )

8. Patient's physician (check one): Private( ) House or staff( )

9. Patient care setting (check one): Private room( )

Semi-private room (2 beds)( ) Ward (3 or more beds)( )

10. In which of the following social classes would you judge the patient to be a member? (check one)

Upper upper( ) Upper middle( ) Upper lower( )

Lower upper( ) Lower middle( ) Lower lower( )

11. Educational level of the patient: (If you are unsure, please use your "best guess.")

( ) No formal education

( ) Grade school

( ) Junior high school

( ) Partial high school

( ) High school graduate

( ) Attended college

( ) College or university graduate

( ) Graduate professional education

12. Occupation of the major wage earner--whether or not it was the patient: (Please check the category which best describes the occupation.)

( ) None, independently wealthy

( ) Executive or proprietor of a large concern or a major professional

( ) Manager or proprietor of medium sized business or a lesser professional

( ) Administrator in a large concern, owner of small independent business or semiprofessional

( ) Owner of little business, clerical or sales worker or technician

( ) Skilled worker

( ) Semiskilled worker

( ) Unskilled worker

13. Patient's primary diagnosis: ______________________________

14. How would you classify this illness? (Please check one in each category.)

A	B
( ) Acute	( ) Medical
( ) Chronic	( ) Surgical
( ) Acute phase of a chronic disease	( ) Medical-surgical

15. Patient's secondary diagnoses, if any: ____________________

____

16. Patient's symptoms:

17. Was the patient disfigured in any way? (Please check any of the following which may be appropriate and complete blanks if indicated.)

Amputation of leg( ) arm( ) breast( ) other( )____

____

Visible lesion due to cancer( ) Location? __________

Visible congenital anomaly( ) Describe ____________

____

Extreme large muscle atrophy( ) Location? __________

____

Traumatic injury( ) Describe ____________________

____

Psoriasis( )

Acne( )

Other( ) _____________________________________

18. Was the patient in the terminal phase of any illness?

Yes( ) No( )

19. Which of the following words or phrases describes this patient best? (Check one in each group.)

A

( ) Outstandingly attractive
( ) Somewhat attractive
( ) Ordinary in appearance
( ) Somewhat unattractive
( ) Very unattractive

B

( ) Very obese
( ) Somewhat overweight
( ) Average; weight about right for height
( ) Very thin

C

( ) Extrovert
( ) Not an extrovert nor an introvert; sometimes outgoing, sometimes introspective
( ) Introvert

20. What was it about the patient which led you to react negatively? (Check one or more of the categories listed below.)

( ) Physical characteristics not associated with the patient's illness

( ) Physical symptoms

( ) Personality traits

( ) Hygienic habits

( ) Other, please specify ______________________________

____

21. Below is a list of selected characteristics or behaviors of patients. Read the following directions and then proceed.

1. Put a check in the space provided to the left of any statement which describes the behavior of the patient you have recalled. Check as many as are applicable.

2. Underline the behavior or characteristic you believe contributed most to the development of the negative reaction.

3. Use the space provided at the end to note any pertinent behavior or characteristic not included in the list.

(✓)
___Was untidy

___Had poor personal hygiene

___Had visitors who were critical of care

___Had too many visitors

___Required intensive or time-consuming care

___Refused to adhere to diet

___Refused medications or treatments

___Did not follow hospital rules

___Would not accept illness

___Would not follow instructions

___Was stubborn

___Was infantile

___Made no effort to help self, though able to do so

___Called for nurse unnecessarily

___Was self-centered

___Had no sense of humor

___Was selfish

___Was preoccupied with bodily functions

___Exposed self

___Made improper advances

___Made sex-related remarks to nurse

___Used loud and abusive language

___Was always telling you what to do

___Was demanding

___Faked illness or symptoms

___Was unfriendly

___Was too quiet; non-assertive

___Cried frequently

___Was apathetic

___Was withdrawn

___Was nervous

___Was rude

___Had a superior attitude

___Wanted special privileges

___Ordered people around

___Reported nurses to physician

___Showed no appreciation of nurses' efforts

___Used profane language

___Complained of inadequate care

___Interfered with nursing routine

___Seemed to require attention just when things were busiest

___Had unpleasant odor

___Was incontinent

___Was chronically complaining ___Was senile

___Had to be suctioned ___Was disoriented

Other. (Please write in any other characteristics.)

Part III. About the second patient

This section of the questionnaire deals with a patient to whom you have reacted positively. Recall such a patient--a specific adult medical-surgical patient with whom you have had contact and to whom you experienced a positive reaction. In recalling this patient to mind try to think of one, for example, whose presence you really enjoyed; or perhaps one who you remember with a good or happy feeling; or one that you liked very much. Be sure that the patient is an adult medical-surgical patient (any age from 15 years on). After recalling this specific patient, answer the following questions in relation to this patient.

Please be sure to respond to every item. If you are not sure of the answer, give your best guess, indicating that it is your "best guess" by putting a question mark after the answer.

THE ITEMS FOR PART III ARE IDENTICAL TO THE ITEMS OF PART II.

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Title: OLDER PERSONS QUESTIONNAIRE (OPQ)

Author: Gillis, Marion

Variable: This instrument was designed to elicit information on the attitudes of nursing personnel toward the aged. Aged was defined by the author as those persons 65 and over. Attitudes were defined as absolute inclinations or mental readiness which consistently exert influence on evaluative responses that are directed toward some person, group, or object (Zimbardo and Ebbersen, 1970).

Description:

Nature and Content: The OPQ is an opinion questionnaire which contains 48 statements related to old age. There is a separate coded answer sheet. The items include such statements as "Oldsters tend to be untrustworthy," and "The real good elderly person is rare." The statements are rated on a 4-point scale of response—strongly agree, mildly agree, mildly disagree, or strongly disagree. Demographic data concerning the nurse respondent are collected in an additional six items of the OPQ.

Administration and Scoring: The OPQ is self-administered. The person completing the OPQ selects the number on the coded answer sheet which corresponds to the chosen response to each of the questionnaire items including the demographic data. The estimated time for completion, as suggested by the author, is 15 minutes. No special skill or training is needed to complete the OPQ.

No information on scoring was provided other than "the higher the score, the more positive the attitude." (It may be inferred that the possible range of scores is from 48 to 192.)

Development:

Rationale: No information concerning the underlying theoretical basis of the instrument was provided.

Source of Items: The instrument is a revision of a 100-item opinion questionnaire published by Lowy (1968).

Procedure for Development: The author revised the Lowy (1968) questionnaire on the basis of the psychometric properties of that instrument. The author explained that "the correlation of each item was compared to the total score for each of the 100 opinion statements. The 48 items which correlated with the total score at 0.40 or above were selected for the revised instrument" (Gillis, 1973).

Reliability and Validity: A reliability coefficient of 0.86 was reported for the instrument, but no details concerning how it was determined were provided. No validity information was provided.

Use in Research: The instrument was used in a study by the author, Sr. Marion Gillis (1972) and reported in an unpublished manuscript at the University of Texas. It was entitled, "Study on Attitudes of Nursing Home Administrators Toward the Aged."

Another study in which Gillis (1973) used this instrument is reported in her master's thesis referenced below.

Comments: Psychometrically, the instrument needs a great deal of attention. In considering the validity of the OPQ, i.e., the determination of attitudes toward the aged on the basis of responses to items on the instrument, some questions must be raised. Among the 48 opinion items are many which do not have a demonstrable bearing upon the variable being investigated, e.g., "If people would talk less and work more, everybody would be better off" (item 26), and "The most vicious, irresponsible, and racketeering unions are, in most cases, those having largely foreigners for leaders" (item 29). Several items express distrust of mankind in general, others express distrust or hatred for youth, social outcasts, and participatory democracy as a political system. Since these items do not contain any reference to the aged, the proof of their relevance in a study of attitudes toward the aged must be questioned. There is lack of continuity in the terminology, i.e., persons over 65 are referred to as "older persons," "elderly persons," "oldsters," and "old people"; this should be corrected. And, further, some items referring to the "disabled," rather than to the elderly, should be reconsidered, because disability cannot be equated with old age. It would also be advantageous to reconsider the few items in which the concepts of old age and illness are combined. If, as may be inferred from the author's statement about the higher the score the more positive the attitude, and, as now written, the preferred answer for each item is "4," then, the items should be rephrased to avoid response set.

References:

Gillis, Marion. *Study on attitudes of nursing home administrators toward the aged.* Unpublished manuscript, University of Texas, 1972.

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______. *Difference in nursing personnel's attitudes toward the aged based on age, education, length of employment, and type of agency.* Unpublished master's thesis, University of Texas, 1973.

______. Attitudes of nursing personnel toward the aged. *Nursing Research*, 1973, *22* (6), 517–520.

Lowy, Louis. *Training manual for human service technicians working with older persons.* Boston, Massachusetts: University Bookstore, 1968.

Zimbardo, Philip, and Ebbersen, Ebbe. *Influencing attitudes and changing behavior.* Reading, Massachusetts: Addison and Wesley Company, 1970.

Source of Information:
Marion Gillis
Supervisor, ADN Program
Lakeshore Technical Institute
1290 North Avenue
Cleveland, Wis. 53015

Instrument Copyright: None.

Gillis, Marion

OLDER PERSONS QUESTIONNAIRE (OPQ)

There are no right or wrong answers to these statements. To answer questions 1-48 kindly indicate the degree to which you AGREE or DISAGREE with the statement of opinion by blackening the space corresponding to the answer as follows:

1 = STRONGLY AGREE
3 = MILDLY DISAGREE
2 = MILDLY AGREE
4 = STRONGLY DISAGREE

1. You should not expect too much from disabled people.
2. Most older persons are hard to please.
3. Certain religious sects whose beliefs do not permit them to salute the flag should be forced to conform to such a patriotic action, or else be abolished.
4. Any group or social movement which contains many foreigners should be watched with suspicion and, whenever possible, be investigated by the F. B. I.
5. The real good elderly person is rare.
6. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.
7. There is really no such thing as a typical old person.
8. The elderly are just as smart as other people.
9. Oldsters tend to be untrustworthy.
10. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
11. It is difficult to understand older persons because they keep so much to themselves.
12. A large-scale system of sterilization would be one good way of breeding out criminals and other undesirable elements in our society and so raise its general standards and living conditions.
13. We are spending too much for the pampering of criminals and the insane, and for the education of incapable people.

1 = STRONGLY AGREE
2 = MILDLY AGREE
3 = MILDLY DISAGREE
4 = STRONGLY DISAGREE

14. The elderly take advantage of other people.

15. When you handle a number of old persons, it is almost impossible to make allowances for differences between them.

16. If people would talk less and work more, everybody would be better off.

17. Most disabled "oldsters" have little sense of responsibility.

18. The elderly are likely to get angry if you mention their being old.

19. The most vicious, irresponsible, and racketeering unions are, in most cases, those having largely foreigners for leaders.

20. You have to be careful what you say when you are with disabled people.

21. What youth needs most is strict discipline, rugged determination, and the will to work and fight for family.

22. Older persons expect everyone to pamper them.

23. The elderly usually will not think for themselves.

24. Oldsters are usually dissatisfied with just about everything.

25. There shouldn't be special schools for disabled persons.

26. It is only natural and right for each person to think that his family is better than any other.

27. One main difficulty with allowing the entire population to participate fully in government affairs (voting, jobs, etc.) is that such a large number of people are deficient and incapable.

28. Parents of disabled children should be less strict than other parents.

29. On the whole, the elderly sick seem to be less intelligent than healthy old people.

30. Oldsters are disagreeable most of the time.

31. Older persons are usually incapable of making significant decisions for themselves.

32. Disabled people should not be expected to meet the same standards as non-disabled persons.

1 = STRONGLY AGREE
2 = MILDLY AGREE
3 = MILDLY DISAGREE
4 = STRONGLY DISAGREE

33. Nobody ever learned anything really important except through suffering.

34. Most older persons are just naturally stubborn.

35. The elderly do not take much pride in themselves.

36. An aggressive person, who has bad manners, habits, and breeding, can hardly expect to get along with decent people.

37. Older persons do not have as much initiative as other persons.

38. Older persons lack imagination.

39. The many political parties tend to confuse national issues, make elections expensive, and stir up unnecessary trouble. It would, therefore, be best if all political parties, except the two major ones, were abolished.

40. Older persons are like children.

41. The elderly cannot have a normal social life.

42. Older persons usually lack humor.

43. Nobody really likes to work with the older disabled person.

44. It sometimes does an elderly person good to be criticized in front of other persons.

45. If the elderly had paid attention to good health habits in their youth, they probably wouldn't be in hospitals and nursing homes today.

46. Most older persons don't appreciate what is being done for them.

47. Oldsters cause a great deal of disruption.

48. Most older persons expect to be taken care of by others.

Title: CHARACTERISTICS OF ADULT PSYCHIATRIC PATIENTS WHOM NURSES RECALL NEGATIVELY AND POSITIVELY

Author: Rickelman, Bonnie L.

Variables: The variable is characteristics of adult psychiatric patients to whom nurses react positively and negatively. *Adult psychiatric patient* is defined as any person 15 years of age or older who has been admitted to a psychiatric treatment facility; *positive reaction* is defined as a feeling of enjoyment, liking, or happiness. *Negative reaction* is defined as a feeling of dislike, annoyance, irritation, anger, repulsion, or physical or emotional aversion.

Description:

Nature and Content: This is a self-administered instrument made up of three parts. Part I consists of 13 items of nurse demographic data, most of which can be answered by placing a check in the appropriate space; 3 are completion-type items. Part II consists of 24 items which elicit descriptive information about an adult psychiatric patient to whom the nurse had a negative reaction. Part III items are exact duplicates of the items in Part II but are to be completed as descriptive of an adult psychiatric patient to whom the nurse had a positive reaction. Many of the items in Parts II and III have multiple parts, and answer formats vary so as to be appropriate for each item. Item 24 for Parts II and III is a list of 74 "selected characteristics or behaviors of patients" directions are to "place a check mark in the space provided to the left of all statements which describe the behavior of the patient you have just recalled."

Administration and Scoring: The instrument is self-administered and was designed to be completed by nurses providing care for adult psychiatric patients. Instructions for completion of each item are on the instrument itself. As indicated above, the response format varies, dependent upon the kind of information sought. The author reported that approximately 30 to 50 minutes are required for completion of the questionnaire, though no time limits are imposed.

No information regarding scoring, per se, was provided by the author. However, the reference cited below should be consulted for information as to how the author scored the instrument for the purposes of her study.

Development:

Rationale: No specific information was provided other than that the theoretical framework of the author's study was based on "attitude theory."

Source of Items: The items of the instrument were based on an instrument developed by Blaylock (1970), a review of literature, the author's professional experience, and consultations with professional peers.

Procedure for Development: Blaylock's questionnaire was modified to make it appropriate for adult psychiatric patients. A pilot study was conducted with psychiatric nurses using the instrument, and, based upon the results of that study, minor revisions were made in the instrument.

Reliability and Validity: The author stated work had been done to establish the reliability and validity of the instrument; however, no specifics were provided.

Use in Research: Rickelman developed and used the instrument for her doctoral dissertation referenced below. Her data "were analyzed to determine whether or not the nurses' perceptions of disliked and liked patients differed, and whether or not characteristics of the nurses related to characteristics of patients to whom they reacted negatively or positively" (Rickelman, 1971).

Comments: As with the Blaylock instrument described elsewhere in this compilation, this instrument is in the early stages of psychometric development and its potential value cannot yet be assessed. It would be helpful to know how the characteristics to be included were identified and delineated. Also, as with the Blaylock instrument, reliability and validity studies are needed, and further analysis may suggest that some items could be eliminated. This would shorten the instrument, yet not alter its usefulness.

References:

Blaylock, Jerry N. *Characteristics of nurses and of medical-surgical patients to whom they react positively and negatively:* Unpublished doctoral dissertation, Teachers College, Columbia University, 1970.

Rickelman, Bonnie. *Characteristics of nurses and psychiatric patients to whom they react positively and negatively.* Unpublished doctoral dissertation, Teachers College, Columbia University, 1971.

Source of Information:

Bonnie Rickelman, R.N., Ph.D.
2601 Toulouse Drive
Austin, Tex. 78745

Instrument Copyright: Bonnie Rickelman, R.N., Ph.D.

Rickelman, Bonnie L.

CHARACTERISTICS OF ADULT PSYCHIATRIC PATIENTS WHOM NURSES RECALL NEGATIVELY AND POSITIVELY

The following questionnaire is divided into three parts. The first part asks for information about your own background. The second and third parts ask for information about two specific adult psychiatric patients with whom you have had contact. Directions for answering the last two parts are given at the beginning of those sections.

It is hoped that you will answer the questions as completely as possible. Though some of the questions are of a personal nature, they are necessary for the validity of this study. Your responses will remain totally anonymous. Please do not write your name anywhere on the questionnaire. Neither you nor the institution where you work will be identified in the study.

Most of the questions require only check marks or short answers. Be sure to read the questions completely and carefully before answering. Please answer every question.

Part I: (Items addressing nurse demographic data have not been reproduced here.)

Part II: About the first patient

It is inevitable that we meet an occasional person to whom we react negatively. The nurse is not immune to this and sometimes reacts negatively to a given patient. This reaction may take the form, for example, of dislike, annoyance, irritation, anger, repulsion, or physical or emotional aversion.

Think back until you remember such a patient--one who caused _you_ to experience a physical or mental reaction which was _negative_. Be sure that the patient is an adult psychiatric patient (any age from 15 years on). After recalling this specific patient, answer the following questions _in relation to this patient_.

Please be sure to respond to every item. If you are not sure of the answer, give your best guess, indicating that it is your "best guess" by putting a question mark after the answer.

1. How long ago did you encounter this patient? A month or less ( )

   2-12 months ( ) 13 months-4 years ( ) 5-9 years ( )

   10-14 years ( ) 15 years or more ( )

2. What was your professional relationship to this patient? (check one):

   ( ) Staff nurse responsible for direct care
   ( ) Head nurse on the unit where patient was located
   ( ) Supervisor of the unit where patient was located
   ( ) Other, please specify _______________

3. Patient's age: 15-19 ( ) 20-30 ( ) 31-40 ( ) 41-50 ( )

   51-60 ( ) 61-70 ( ) Over 70 ( )

4. Patient's sex: Male ( ) Female ( )

5. Patient's marital status: Single ( ) Married ( ) Separated ( )

   Divorced ( ) Widowed ( )

6. Patient's religion: Catholic ( ) Jewish ( ) Protestant ( )

   None ( ) Don't know ( ) Other, please specify _______________

7. Patient's race: ____________

8. What is the patient's country of origin? (If American, please indicate ancestry, i.e., Irish, Italian, etc.) ____________
____________ Don't know ( )

9. Patient's physician (check one): Private ( ) House or staff ( )

10. Patient's room accommodations: Private room ( )

Semi-private (2 beds) ( ) Ward ( )

11. Kind of treatment facility in which you had contact with the patient: (check one)

State hospital ( ) Private psychiatric hospital ( )

Psychiatric unit in general hospital ( )

Psychiatric out-patient clinic ( ) Day hospital ( )

V.A. hospital ( ) Other (please specify) ____________

12. In which of the following social classes would you judge the patient to be a member? (check one)

Upper upper ( ) Upper middle ( ) Upper lower ( )
Lower upper ( ) Lower middle ( ) Lower lower ( )

13. Educational level of the patient: (If you are unsure, please use your "best guess.")

( ) No formal education
( ) Grade school
( ) Junior high school
( ) Partial high school
( ) High school graduate
( ) Attended college
( ) College or university graduate
( ) Graduate professional education

14. Patient's psychiatric diagnosis: ____________________

____

15. Patient's symptoms: (Briefly describe)

16. Approximately how long had the patient been psychiatrically ill? (check one)

( ) Under 1 year
( ) 1-2 years
( ) 3-5 years
( ) 6 years or more

17. In what way did the patient affect you personally? (Briefly state)

18. Was this patient the kind of person whom you felt you understood? (check one)

Yes ( )   No ( )

19. In your opinion, what is or was this patient's prognosis?

( ) Excellent: Patient was or will be discharged and will probably not need in-patient or out-patient psychiatric treatment again.

( ) Good: Patient was or will be discharged; may need continued drug and/or psychotherapy, but there is a good chance that readmission to a psychiatric unit will not be necessary.

( ) Fair: Patient was or possibly may be discharged; however, the likelihood of readmission is almost certain. Patient will probably be in and out of psychiatric institutions for rest of life.

( ) Poor: Unlikely that patient can ever function at a minimally acceptable level outside institution.

20. In addition to the psychiatric illness, did the patient also have a medical problem or diagnosis of any kind? (check one)

Yes ( ) No ( ) If yes, please specify nature of the problem:

____

21. Was the patient disfigured in any way? (Please check any of the following which may be appropriate and complete blanks, if applicable)

Acne ( ) Psoriasis ( ) Any other visible lesion ( ) Kind and

location ______________________________________

Amputation of: leg ( ) arm ( ) breast ( ) other ( ) ______

____

Traumatic injury disfiguration ( ) Describe ______________

____

Visible congenital anomaly ( ) Describe ________________

22. Which of the following words or phrases best described this patient? (check one in each group)

A
( ) Outstandingly attractive
( ) Somewhat attractive
( ) Ordinary in appearance
( ) Somewhat unattractive
( ) Very unattractive

B
( ) Very obese
( ) Somewhat overweight
( ) Average; weight about right for height
( ) Very thin

C
( ) Extrovert
( ) Neither an extrovert nor an introvert; sometimes outgoing, sometimes quiet and introspective
( ) Introvert

23. What was it about the patient which led you to react negatively? (Briefly describe)

24. Below is a list of selected characteristics or behaviors of patients. Read the following directions and then proceed.

    1. Put a check mark in the space provided to the left of all statements which describe the behavior of the patient you have just recalled. Check as many as are applicable to this particular patient.

    2. Use the space provided at the end to note any pertinent behavior or characteristic not included in the list.

----

1. _____ Was untidy or had poor personal hygiene
2. _____ Failed to improve despite good care
3. _____ Responded positively to care; showed improvement
4. _____ Refused to accept idea of psychiatric illness
5. _____ Was respectful toward others
6. _____ Was mentally deficient
7. _____ Avoided chronic complaining
8. _____ Was slow and disorganized in movements
9. _____ Did not interfere with nursing routine
10. _____ Took medications and treatments as ordered
11. _____ Was genuinely interested in others, or related to people in a warm way
12. _____ Refused medications or treatments
13. _____ Faked psychiatric or physical illness
14. _____ Used loud, abusive, or vulgar language
15. _____ Was senile
16. _____ Was sensitive and perceptive
17. _____ Was always telling you what to do
18. _____ Did not demand nurses' attention
19. _____ Made you feel sympathetic and understanding toward (him) (her)

20. _____ Was quarrelsome and antagonistic
21. _____ Was manipulative
22. _____ Was unselfish
23. _____ Was apathetic
24. _____ Gave support to other
25. _____ Needed reassurance and support
26. _____ Was constantly seeking the nurse's attention
27. _____ Suffered quietly
28. _____ Refused to accept help or to make an effort to help self
29. _____ Was tidy or had good personal hygiene
30. _____ Was mild in manner
31. _____ Was physically assaultive to others or property
32. _____ Was critical of others
33. _____ Followed hospital rules and instructions
34. _____ Made improper advances to nurse (in physical contact or personal remarks)
35. _____ Showed no appreciation of nurse's efforts
36. _____ Did not request special privileges
37. _____ Realized emotional problems and sought help
38. _____ Was demanding
39. _____ Tried to make others feel sorry for (him)(her)
40. _____ Did not fake psychiatric or physical illness
41. _____ Realized self-responsibility in getting well
42. _____ Had a sense of humor, or was entertaining
43. _____ Was always complaining
44. _____ Would not follow hospital rules or instructions
45. _____ Caused no uncomfortable scenes
46. _____ Bullied other patients
47. _____ Had no sense of humor
48. _____ Repeatedly confronted nurse with same requests, questions and statements
49. _____ Was mistreated by family or others
50. _____ Was suspicious
51. _____ Wanted special privileges
52. _____ Made requests in a nice way
53. _____ Seemed lonely
54. _____ Spoke in a whining voice

55. _____ Was cooperative

56. _____ Cried frequently

57. _____ Exposed self

58. _____ Was sarcastic or rude

59. _____ Interfered with nursing routine

60. _____ Was disoriented

61. _____ Was polite

62. _____ Was intelligent

63. _____ Was self-centered or selfish

64. _____ Was shy or modest

65. _____ Could not make decisions

66. _____ Was infantile

67. _____ Seemed to appreciate nurses' attempts to help

68. _____ Was frank and open

69. _____ Complaints seemed warranted

70. _____ Was stubborn

71. _____ Was refined

72. _____ Had outbursts of rage

73. _____ Was sincere

74. _____ Had a superior attitude

Other: (Please write in any other characteristics)

Part III: About the second patient

This section of the questionnaire deals with a patient to whom you have reacted positively. Recall such a patient--a specific adult psychiatric patient with whom you have had contact and to whom you experienced a positive reaction. In recalling this patient to mind, try to think of one, for example, whose presence you really enjoyed; or perhaps one whom you remember with a good or happy feeling; or one whom you liked very much. Be sure that the patient is an adult psychiatric patient (any age from 15 on). After recalling this specific patient, answer the following questions in relation to this patient.

Please be sure to respond to every item. If you are not sure of the answer, give your best guess, indicating that it is your "best guess" by putting a question mark after the answer.

1. How long ago did you encounter this patient? A month or less ( )
   2-12 months ( ) 13 months-4 years ( ) 5-9 years ( )
   10-14 years ( ) 15 years or more ( )

2. What was your professional relationship to this patient?
   ( ) Staff nurse responsible for direct care
   ( ) Head nurse on the unit where patient was located
   ( ) Supervisor of the unit where patient was located
   ( ) Other, please specify ____________________________

3. Patient's age: 15-19 ( ) 20-30 ( ) 31-40 ( ) 41-50 ( )
   51-60 ( ) 61-70 ( ) Over 70 ( )

4. Patient's sex: Male ( ) Female ( )

5. Patient's marital status: Single ( ) Married ( ) Separated ( )
   Divorced ( ) Widowed ( )

6. Patient's religion: Catholic ( ) Jewish ( ) Protestant ( )
   None ( ) Don't know ( ) Other, please specify ______________

7. Patient's race: ____

8. What is the patient's country of origin? (If American, please indicate ancestry, i.e., Irish, Italian, etc.) ______________
   ____ Don't know ( )

9. Patient's physician (check one): Private ( ) House or staff ( )

10. Patient's room accommodations: Private room ( )

Semi-private (2 beds) ( ) Ward ( )

11. Kind of treatment facility in which you had contact with the patient: (check one)

State hospital ( ) Private psychiatric hospital ( )

Psychiatric unit in general hospital ( )

Psychiatric out-patient clinic ( ) Day hospital ( )

V.A. hospital ( ) Other, please specify ____________________

12. In which of the following social classes would you judge the patient to be a member? (check one)

Upper upper ( )
Lower upper ( )
Upper middle ( )
Lower middle ( )
Upper lower ( )
Lower lower ( )

13. Educational level of the patient: (If you are unsure, please use your "best guess")

( ) No formal education
( ) Grade school
( ) Junior high school
( ) Partial high school
( ) High school graduate
( ) Attended college
( ) College or university graduate
( ) Graduate professional education

14. Patient's psychiatric diagnosis: ________________________________

____

15. Patient's symptoms: (briefly describe)

16. Approximately how long had the patient been psychiatrically ill? (check one)

    ( ) Under 1 year
    ( ) 1-2 years
    ( ) 3-5 years
    ( ) 6 years or more

17. In what way did the patient affect you personally? (Briefly state)

18. Was this patient the kind of person whom you felt you understood? (check one)

    Yes ( ) No ( )

19. In your opinion, what is or was this patient's prognosis?

    ( ) Excellent: Patient was or will be discharged and will probably not need in-patient or out-patient psychia treatment again.

    ( ) Good: Patient was or will be discharged; may need continued drug and/or psychotherapy, but there is a good chance that readmission to a psychiatric unit will not be necessary.

    ( ) Fair: Patient was or possibly may be discharged; however, the likelihood of readmission is almost certain. Patient will probably be in and out of psychiatric institutions for rest of life.

    ( ) Poor: Unlikely that patient can ever function at a minimally acceptable level outside institution.

20. In addition to the psychiatric illness, did the patient also have a medical problem or diagnosis of any kind? (check one)

    Yes ( ) No ( ) If yes, please specify nature of the problem:

    ____

21. Was the patient disfigured in any way? (Please check any of the following which may be appropriate and complete blanks, if applicable)

Acne ( ) Psoriasis ( ) Any other visible lesion ( ) Kind and

location ____

Amputation of: leg ( ) arm ( ) breast ( ) Other ( ) _____

____

Traumatic injury disfiguration ( ) Describe _______________

____

Visible congenital anomaly ( ) Describe ____________________

22. Which of the following words or phrases best describes this patient? (Check one in each group)

A

( ) Outstandingly attractive
( ) Somewhat attractive
( ) Ordinary in appearance
( ) Somewhat unattractive
( ) Very unattractive

B

( ) Very obese
( ) Somewhat overweight
( ) Average; weight about right for height
( ) Very thin

C

( ) Extrovert
( ) Neither an extrovert nor an introvert; sometimes outgoing, sometimes quiet and introspective
( ) Introvert

23. What was it about the patient which led you to react positively? (Briefly describe)

24. Below is a list of selected characteristics or behaviors of patients. Read the following directions and then proceed.

1. Put a check mark in the space provided to the left of all statements which describe the behavior of the patient you have recalled. Check as many as are applicable.
2. Use the space provided at the end to note any pertinent behavior or characteristic not included in the list.

---

1. _____ Was untidy or had poor personal hygiene
2. _____ Failed to improve despite good care
3. _____ Responded positively to care; showed improvement
4 _____ Refused to accept idea of psychiatric illness
5. _____ Was respectful toward others
6. _____ Was mentally deficient
7. _____ Avoided chronic complaining
8. _____ Was slow and disorganized in movements
9. _____ Did not interfere with nursing routine
10. _____ Took medications and treatments as ordered
11. _____ Was genuinely interested in others, or related to people in a warm way
12. _____ Refused medications or treatments
13. _____ Faked psychiatric or physical illness
14. _____ Used loud, abusive, or vulgar language
15. _____ Was senile
16. _____ Was sensitive and perceptive
17. _____ Was always telling you what to do
18. _____ Did not demand nurses' attention
19. _____ Made you feel sympathetic and understanding toward (him)(her)
20. _____ Was quarrelsome and antagonistic
21. _____ Was manipulative
22. _____ Was unselfish
23. _____ Was apathetic

24. _____ Gave support to other patients

25. _____ Needed reassurance and support

26. _____ Was constantly seeking the nurse's attention

27. _____ Suffered quietly

28. _____ Refused to accept help or to make an effort to help self

29. _____ Was tidy of had good personal hygiene

30. _____ Was mild in manner

31. _____ Was physically assaultive to others or property

32. _____ Was critical of others

33. _____ Followed hospital rules and instructions

34. _____ Made improper advances to nurse (in physical contact or personal remarks)

35. _____ Showed no appreciation of nurses' efforts

36. _____ Did not request special privileges

37. _____ Realized emotional problems and sought help

38. _____ Was demanding

39. _____ Tried to make others feel sorry for (him) (her)

40. _____ Did not fake psychiatric or physical illness

41. _____ Realizes self-responsibility in getting well

42. _____ Had a sense of humor, or was entertaining

43. _____ Was always complaining

44. _____ Would not follow hospital rules or instructions

45. _____ Caused no uncomfortable scenes

46. _____ Bullied other patients

47. _____ Had no sense of humor

48. _____ Repeatedly confronted nurse with same requests, questions and statements

49. _____ Was mistreated by family or others

50. _____ Was suspicious

51. _____ Wanted special privileges

52. _____ Made requests in a nice way

53. _____ Seemed lonely

54. _____ Spoke in a whining voice

55. _____ Was cooperative

56. _____ Cried frequently

57. _____ Exposed self

58. _____ Was sarcastic or rude

59. _____ Interfered with nursing routine

60. _____ Was disoriented

61. _____ Was polite

62. _____ Was intelligent

63. _____ Was self-centered or selfish

64. _____ Was shy or modest

65. _____ Could not make decisions

66. _____ Was infantile

67. _____ Seemed to appreciate nurses' attempts to help

68. _____ Was frank and open

69. _____ Complaints seemed warranted

70. _____ Was stubborn

71. _____ Was refined

72. _____ Had outbursts of rage

73. _____ Was sincere

74. _____ Had a superior attitude

Other: (Please write in any other characteristics)

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Provider-Client Interaction: Provider's Perceptions of Client Care and Health Services

Title: NURSING AUTONOMY AND PATIENTS' RIGHTS QUESTIONNAIRE

Authors: Pankratz, Loren, and Pankratz, Deanna

Variables: This instrument provides information on three variables: nursing autonomy and advocacy, patients' rights, and rejection of traditional role limitations. *Nursing autonomy and advocacy* is defined as the extent that nurses feel comfortable in taking initiative and responsibility in the hospital. *Patients' rights* is defined as the nurse's hypothetical concession of certain rights to patients. *Rejection of traditional role limitations* is defined as the nurse's willingness to openly disagree with the doctor and to become highly involved in the personal matters of patients.

Description:

Nature and Content: This instrument consists of 47 statements designed to elicit information about nurses' attitudes toward their professional role and patients' rights. *Nursing autonomy and advocacy* is operationalized by responses to 26 items; *patients' rights* is operationalized by responses to 14 items; and *rejection of traditional role limitations* is operationalized by responses to 13 items.

A 5-point response scale is used where 1=strongly agree, 2=agree, 3=undecided, 4=disagree, and 5=strongly disagree. Data are also collected regarding the position of the nurse (staff nurse, head nurse, etc.).

Administration and Scoring: This instrument is designed to be completed by a nurse. Instructions are provided as part of the questionnaire.

Nursing autonomy and advocacy is scored by adding the scores on the following 15 items: 1, 3, 4, 8, 14, 18, 23, 24, 27, 34, 37, 39, 40, 41, and 42. Subtract the total score on these items from 90. Add the preceding results to the total score on the following 11 items: 5, 9, 10, 11, 12, 15, 30, 36, 38, 45, 46.

Patients' rights is scored by adding the scores on the following 14 items: 6, 16, 17, 19, 20, 21, 26, 28, 29, 32, 33, 34, 43, and 44. Subtact the total score on these items from 84.

Rejection of traditional role limitations is scored by subtracting the subject's score on item 7 from 6. Then add the preceding result to the total score of the following 12 items: 2, 5, 10, 11, 13, 22, 25, 31, 35, 45, 46, and 47.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: Construction of the items on patients' rights was based on a questionnaire developed during a conference on patients' rights at Northwest Hospital in Seattle. Additional items were devised from comments nurses made while responding to the initial questionnaire. The items on nurse autonomy were obtained from statements made by nurses regarding the extent to which they were willing to assert themselves in the hospital environment. Additional items were contributed by nursing leaders on issues they felt were currently being debated in discussions of nursing autonomy.

Procedure for Development: The initial form of 69 items was given to 200 registered nurses in a large community (teaching) hospital. The sample represented all shifts and about two-thirds of the total population of nurses in the hospital. A preliminary factor analysis indicated the presence of the variables of interest to the authors. In order to strengthen the potential generality of these variables, the sample was expanded by including nurses from two similar hospitals in another State, two university hospitals, a large modern psychiatric hospital, and 205 nursing administrators throughout the West. The final sample thus had a total of 702 subjects.

The data from the 702 subjects were factor analyzed according to two different procedures. These two methods are described in Pinneau et al. (1966), and in Tryon and Bailey (1966, 1970). The variables identified by these procedures were then analyzed to determine the extent to which differences between nursing groups were present.

Reliability and Validity: No information was provided regarding reliability of the instrument.

No information was provided regarding the relationship between the items assigned to each variable or their relationship to the total score for the respective variable. However, the results indicated a high degree of similarity in the way the items defined the factors. The authors report that nursing leaders had significantly higher scores on *nursing autonomy and advocacy* than did nurses who worked in the community hospitals. Similar differences were also reported on *patients' rights*, and *rejection of traditional role limitations*. The authors also reported a significant relationship between degree status and all three variables. No other demographic variables were related to scores on these measures.

Use in Research: The use of the instrument in a study by Pankratz and Pankratz (1974) is described in the reference cited below.

Comments: This device appears to have a potential for providing information on the three variables it purports to measure. However, more information is required before a determination can be made regarding its ultimate value.

It would be useful to have information on the test-retest characteristics of the measures. It would also be helpful to have information regarding the inter-item, item-variable, and between-variable characteristics of the three measures. However, the fact that there is considerable overlap between the factor definitions suggests that the test is likely to produce stable measures of the three variables. And, the fact that the sample used to develop the factors was fairly heterogeneous and large also suggests that the factors are likely to be generalizable across nurses.

The fact that some items are assigned to more than one factor necessarily produces a statistical relationship between them. Since it is desirable to minimize the extent to which built-in statistical relationships are present, it would be helpful to have information regarding the relationship between the three measures and other demographic data when this built-in characteristic is eliminated.

It would also be useful to have information regarding the comparative power of the measures when they were based only on the cluster analytic procedures and/or only on the items that had the same variable assignment across the two factor analytic methods.

Finally, the scoring procedure appears to be more complex than may be necessary. Therefore, it would be useful to have information regarding the power of these measures to differentiate between groups when the score was based on a simple average of the actual responses to the various items used to measure a specific variable.

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Pankratz, Loren, and Pankratz, Deanna. Nursing autonomy and patients' rights: Development of a nursing attitude scale. *Journal of Health and Social Behavior*, 1974, *15* (3), 211–216.

Pinneau, S. A., Levine, A., Schurr, B., and Butler, D. Analysis of factor variance: One-way classification. *Perceptual and Motor Skills*, 1966, *23*, 1209–1213.

Tryon, R. C., and Bailey, D. E. The B. C. Try computer system of cluster and factor analysis. *Multivariate Behavioral Research*, 1966, *1*, 95–111.

______. Cluster Analysis. New York: McGraw-Hill, 1970.

Source of Information:
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Instrument Copyright: None.

Pankratz, Loren, and Pankratz, Deanna

NURSING AUTONOMY AND PATIENTS' RIGHTS QUESTIONNAIRE

Identification: ____________________

We would like to know what you think about these statements. For each opinion statement, place a check in the box to the right of the question that comes closest to how you feel. There are no right or wrong answers. Please answer every item.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I feel that patients should plan their own activities.					
2. I have fulfilled my responsibility when I report a condition to a physician.					
3. I would feel free to try new approaches to patients care without the "permission" of an administrative nurse.					
4. I feel free to recommend non-prescription medication.					
5. If I requested a psychiatric consult for a patient, I would feel out of bounds.					
6. I believe a patient has a right to have all his questions answered for him.					
7. If I am not satisfied with the doctor's action, I would pursue the issue.					
8. I am the best person in the hospital to be the patient's advocate if he disagrees with the doctor.					
9. If a patient is allowed to keep a lot of personal items, it becomes more trouble than it is worth.					
10. I don't answer too many questions of the patient because the doctor may have another plan in mind.					
11. I feel the doctor is far better trained to make decisions than I.					
12. I would never call a patient's family after discharge.					
13. Patients should not have any responsibility in a hospital.					
14. Patients should be permitted to go off their unit and elsewhere in the hospital.					
15. If a patient asks why his medication is changed, I would refer him to his doctor.					
16. If a policy change effects patient care, I want to understand why the change is necessary					

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
17. Patients should be encouraged to show their feelings.					
18. I should be able to go into private practice like a doctor if I wish.					
19. I feel patients should be told the medications they are taking.					
20. I should have a right to know why a change is necessary before it is accepted.					
21. Patients should be told their diagnosis.					
22. If I make conversation with the patient, there is no need to explain procedures and treatments before they are started.					
23. I generally know more about the patient than the doctor.					
24. Patients in a hospital have a right to select the type of treatments or care they wish.					
25. If I disagree with the doctor, I keep it to myself.					
26. I feel the patient has the right to expect me, as a nurse, to effectively utilize my time in improving my skills by taking advantage of educational opportunities offered.					
27. I would feel comfortable in authorizing a patient to leave the unit to go to another part of the hospital.					
28. The patient has a right to expect me to regard his personal needs to have priority over mine.					
29. I feel the patient has a right to refuse care.					
30. It should be the doctor who decides if the patient can administer his own drugs.					
31. I would never refuse to carry out a doctor's order.					
32. I feel that patients should be informed as to what constitutes quality health care.					

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
33. The patient has a right to expect me to accept his social cultural code and to consider its influence on his way of life.					
34. Patients should be permitted to wear what they want.					
35. I would never interact with a patient on a first name basis.					
36. I rarely give in to patient pressure.					
37. Nurses should be held solely legally responsible for their own actions and not expect to come under the umbrella of the doctor or hospital in a malpractice suit.					
38. Doctors must decide what nurses can and cannot do in the delivery of health care.					
39. It is the perogative of the nurse to decide whether or not to wear a uniform.					
40. I would give the patient his diagnosis if he asks.					
41. It should be the nurse's decision when to talk to the terminal patient about his condition.					
42. I think it is my responsibility to initiate public health referrals on patients.					
43. I feel that I should suggest to patients, family, and doctor any community resources that I know are available.					
44. Patients can expect me to speak up for them.					
45. I would never ask a patient about his or her sexual life.					
46. I would talk very little to patients about their past.					
47. I rarely ask a patient a personal question.					

****

Please check one:
Supervisor or Administrative Nurse ____________
Head Nurse__________ Staff Nurse __________ Other ________
Student Nurse________ Year ________ Nursing Area__________

Title: PATIENTS' BILL OF RIGHTS QUESTIONNAIRE

Author: Pankratz, Deanna

Variables: A subject's perception of certain patient rights, as identified in the statement by the American Hospital Association, and the extent to which each right is available in a particular health care setting are the variables under study.

Description:

Nature and Content: This self-administered instrument consists of 25 statements that are designed to provide information on attitudes toward patients' rights and whether or not these rights are provided in a particular health care setting. The statements are presented on the left side of the questionnaire and are followed by two major columns, one headed "Do you agree with this statement?" and one headed "Is this statement true in this hospital?" Each of these two major columns is subdivided into three response categories headed "Yes," "No," and "Undecided." Sample statements are:

3a. The patient has the right to receive from his physician information necessary to give informed consent prior to the start of any procedure and/or treatment.
5b. Those not directly involved in his care must have permission of the patient to be present.

Administration and Scoring: No information was provided regarding administration procedures.

No information was provided regarding the scoring of the instrument.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: The items were adapted from the American Hospital Association's (AHA) statement on Patients' Bill of Rights, with AHA permission.

Procedure for Development: The 12 AHA statements were divided into 25 single items by the author.

Reliability and Validity: No information was available.

Use in Research: This instrument has not been used in any research.

Comments: This instrument may have some value in identifying areas of discrepancy between the standards that have been suggested and the reality of what is perceived as available. Some of the items are complex, i.e., contain more than one thought or idea. These items should be revised and refined so that each addresses only one thought or idea.

A scoring system which would allow for quantification of responses should be developed and a standardized method of administration devised. Since the device has not been used, anyone contemplating using it must establish its reliability and validity.

References: None.

Source of Information:
Loren Pankratz, Ph.D.
Psychology Service
Veterans' Administration Hospital
Portland, Oreg. 97207

Instrument Copyright: None.

Pankratz, Deanna

PATIENTS' BILL OF RIGHTS QUESTIONNAIRE

		Do you agree with this statement?			Is this statement true in this hospital?		
		Yes	No	Undecided	Yes	No	Undecided
1.	The patient has the right to considerate and respectful care.						
2a.	The patient has the right to obtain from his physician complete current information concerning his diagnosis, treatment, and prognosis in terms the patient can be reasonably expected to understand.						
2b.	When it is not medically advisable to give such information to the patient, the information should be made available to an appropriate person in his behalf.						
2c.	He has the right to know by name, the physician responsible for coordinating his care.						
3a.	The patient has the right to receive from his physician information necessary to give informed consent prior to the start of any procedure and/or treatment.						
3b.	Except in emergencies, such information for informed consent, should include but not necessarily be limited to the specific procedure and/or treatment, the medically significant risks involved, and the probable duration of incapacitation.						
3c.	Where medically significant alternatives for care or treatment exist, or when the patient requests information concerning medical alternatives, the patient has the right to such information.						

		Do you agree with this statement?			Is this statement true in this hospital?		
		Yes	No	Undecided	Yes	No	Undecided
3d.	The patient also has the right to know the name of the person responsible for the procedures and/or treatment.						
4.	The patient has the right to refuse treatment to the extent permitted by law, and to be informed of the medical consequences of his action.						
5a.	The patient has the right to every consideration of his privacy concerning his own medical care program. Case discussion, consultation, examination, and treatment are confidential and should be conducted discreetly.						
5b.	Those not directly involved in his care must have the permission of the patient to be present.						
6.	The patient has the right to expect that all communications and records pertaining to his care should be treated as confidential.						
7a.	The patient has the right to expect that within its capacity a hospital must make reasonable response to the request of a patient for services.						
7b.	The hospital must provide evaluation, service, and/or referral as indicated by the urgency of the case.						

		Do you agree with this statement?			Is this statement true in this hospital?		
		Yes	No	Undecided	Yes	No	Undecided
7c.	When medically permissible a patient may be transferred to another facility only after he has received complete information and explanation concerning the needs for and alternatives to such a transfer.						
7d.	The institution to which the patient is to be transferred must first have accepted the patient for transfer.						
8a.	The patient has the right to obtain information as to any relationship of his hospital to other health care and educational institutions insofar as his care is concerned.						
8b.	The patient has the right to obtain information as to the existence of any professional relationships among individuals, by name, who are treating him.						
9a.	The patient has the right to be advised if the hospital proposes to engage in or perform human experimentation affecting his care or treatment.						
9b.	The patient has the right to refuse to participate in such research projects.						
10a.	The patient has the right to expect reasonable continuity of care.						
10b.	He has the right to know in advance what appointment times and physicians are available and where.						

		Do you agree with this statement?			Is this statement true in this hospital?		
		Yes	No	Undecided	Yes	No	Undecided
10c.	The patient has the right to expect that the hospital will provide a mechanism whereby he is informed by his physician or a delegate of the physician of the patient's continuing health care requirements following discharge.						
11.	The patient has the right to examine and receive an explanation of his bill regardless of source of payment.						
12.	The patient has the right to know what hospital rules and regulations apply to his conduct as a patient.						

Title: NURSE PERCEPTIONS QUESTIONNAIRE

Author: Pienschke, Darlene

Variables: Patient needs and adequacy of care as perceived by the nurse are the variables being measured.

Description:

Nature and Content: The instrument is made up of 12 primary and 7 subquestions that provide information about a variety of aspects of nurse-patient interactions. The questions focus particularly upon events that describe typical patient problem areas and the degree of satisfaction felt by the nurse with respect to the resolution of these problem areas for patients who have cancer. A variety of response categories were provided for the questions.

Administration and Scoring: This instrument is designed to be completed by nurses as they observe and attempt to respond to the needs of patients who have cancer. Categorization of questions and tabulation of responses to the questions to compute a score on the two variables must be obtained from the author.

Development:

Rationale: The instrument was developed to provide data that could be used to indicate the consequences of differing approaches for giving cancer patients information about their diagnosis and prognosis.

Source of Items: The items were based upon those developed by Johnson and Thielbar (1971) and the author's experiences.

Procedure for Development: The author adapted the questionnaires used by Johnson and Thielbar and asked 32 nurses to complete the adaptation.

Reliability and Validity: No information on reliability was provided.

Pienschke's (1973) results indicate that there was a tendency for greater congruence between nurses' perception of patient needs and adequacy of care to occur when patients were provided with more information about their illness. However, no information was provided regarding the probability that this tendency was due to chance factors.

Use in Research: Pienschke's (1973) description of the use of this instrument, her Physician Checklist, and her Patient Interview Questionnaire, described elsewhere in this compilation, can be found in the published article referenced below.

Comments: Due to the limited nature of the sample, the lack of information regarding the inter-item and item-criterion characteristics of these variables, and the lack of specific information regarding how the congruency data were derived, it is premature to draw any conclusions about the ultimate usefulness of the information provided by this instrument. Lack of information on categorization of responses, tabulation, and scoring also add to the difficulty of evaluating this instrument. Any potential user should examine the instrument from the standpoint of conceptualization of the variables, content and format, as well as reliability and validity for his(her) research purposes.

References:

Johnson, J., and Thielbar, G. W. *Pretest of the impact of patient welfare of pharmacist assistants administering medications.* Madison, Wis.: University of Wisconsin School of Nursing, 1971. Mimeographed.

Pienschke, Sr. Darlene. Guardedness or openness on the cancer unit. *Nursing Research,* 1973, *22* (6), 484–490.

Source of Information:

Sr. Darlene Pienschke, B.S., M.S.
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Marquette University
4311 North 100 Street
Milwaukee, Wis. 53222

Instrument Copyright: Sr. Darlene Pienschke, B.S., M.S.

Pienschke, Darlene

NURSE PERCEPTIONS QUESTIONNAIRE

1. How satisfied are you with your knowledge about the patient's needs and what is happening to him today?

Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Extremely satisfied

2. What has contributed to your satisfaction, or dissatisfaction, with your knowledge about the patient today?

3. Place a check before each problem area listed, if the patient has had a problem in that area today.

		Problem Areas	Satisfaction With Help Patient Has Received Today
1.	________	food and water	________
2.	________	Physical activity - ambulation - turning, etc.	________
3.	________	rest and sleep	________
4.	________	pain	________
5.	________	elimination	________

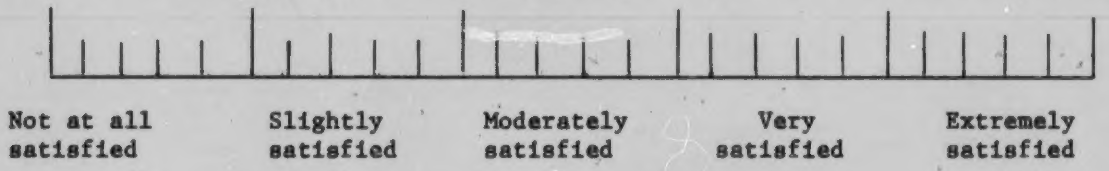
	Problem Areas	Satisfaction With Help Patient Has Received Today
6. __________	undesirable effects of medication	__________
7. __________	respiratory function	__________

By writing in the space directly below each listed problem area that you checked, indicate what approaches were taken to solve the problem today.

Go back over the problem areas you checked, and by placing one of the following codes on the line provided in the right hand column, indicate how satisfied you are with the help given.

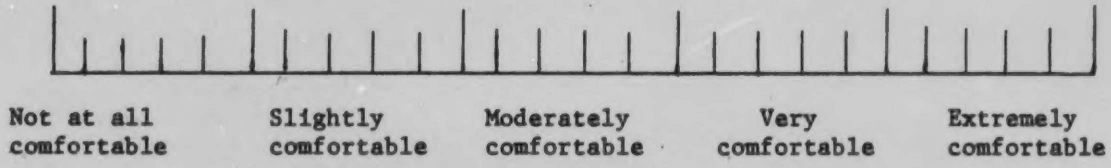
+++ Extremely satisfied, patient's problem under control.
++ Moderately satisfied, about as good an approach and effect as possible.
+ Some satisfaction, but more could be done or achieved.
0 Not satisfied, little or no success or few attempts to solve problem.
- Unsatisfied, no attempts were made to solve or control problem.

4. How satisfied are you with your working relationship with the patient?


Not at all satisfied
Slightly satisfied
Moderately satisfied
Very satisfied
Extremely satisfied

5. What has contributed to your satisfaction, or dissatisfaction, with your working relationship with the patient?

6. How would you describe your degree of comfort in discussing with the patient questions he has about his condition?


Not at all comfortable
Slightly comfortable
Moderately comfortable
Very comfortable
Extremely comfortable

7. What has contributed to your comfort, or discomfort, in discussing with the patient questions he has about his condition?

8. Check the left hand column if the patient asked you questions about his diagnosis, prognosis, and treatment. For those you have checked, answer the remaining columns respectively.

	Patient asked you questions Yes ( )	Information you gave the patient* (state briefly)	Information the doctor gave the patient (state briefly)
Diagnosis	( )		
Prognosis	( )		
Treatment	( )		

*Indicate "referred to doctor" when applicable

9. What words did the patient use to describe his condition?

____	neoplasm	____	growth
____	malignancy	____	cancer
____	lesion	____	tumor
____	mass	other	____

10. What words did you use to describe his condition?

____	neoplasm	____	growth
____	malignancy	____	cancer
____	lesion	____	tumor
____	mass	other	____

11. What is your impression of the patient's reaction to his diagnosis?

____ disbelieving
____ depression
____ anger, irritability
____ withdrawal
____ acceptance
other ____
____ don't know

12. What did the patient do or say that led to the conclusion in Question 11? Describe briefly.

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Title: QUALITY OF NURSING CARE QUESTIONNAIRE—HEAD NURSE

Authors: Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

Variables: This instrument elicits information on seven variables that address a head nurse's perceptions of the quality of nursing care on her unit. Five of these variables are: physical care, emotional care, nurse-physician relationship, teaching and preparation for home care, and administration. The sixth variable is called the quality of nursing care. The seventh variable is not named, but it provides information concerning the degree of satisfaction expressed by a head nurse regarding the nursing care provided for a group of patients. No definitions were provided for these variables.

Description:

Nature and Content: This instrument consists of 41 questions designed to elicit information from head nurses concerning the quality of nursing care provided for patients in a hospital setting.

The variables are operationalized by combining responses to various subgroups of questions contained in this instrument. *Physical care* is operationalized by 11 questions; *emotional care* is operationalized by 15 questions; *nurse-physician relationship* is operationalized by 3 questions; *teaching and preparation for home care* is operationalized by 2 questions; *administration* is operationalized by 9 questions; *quality of nursing care* is operationalized by combining the responses to all of the items used in the 5 variables described above. The summary description of the quality of care given is operationalized by one item: "Please indicate which term best describes the nursing care given this group of patients in the past week." A 5-point scale is provided for responses to all of the questions. For 40 of these questions, the five response categories are: always, usually, sometimes, seldom, and never. The five response categories for the item which summarizes the quality of nursing care are: excellent, very good, satisfactory, only fair, and unsatisfactory.

Administration and Scoring: This instrument was designed to be completed by a head nurse who has supervised care for a group of patients. Instructions are provided as part of the questionnaire. Scores for each variable are computed by assigning a number from 1 to 5 for each of the five choice response categories so that 1=never, 2=seldom, 3=sometimes, 4=usually, and 5=always. The score for a given variable is the average of the responses to the subgroup of questions used to measure that variable. Unanswered questions are assigned a numerical value of 3.

Development:

Rationale: The instrument was developed to provide information regarding the relationship between hospital staffing patterns and head nurses' perceptions of the quality of nursing care provided for patients.

Source of Items: The items were developed by a committee made up of nursing and hospital administrators, nursing school faculty, staff physicians, head nurses, patients, and the authors.

Procedure for Development: The various groups of persons identified above were asked to indicate what factors were important to good nursing care and to provide examples of each. Their responses were reworded to form statements that could be responded to by head nurses. The initial form of this instrument was completed by personnel on two hospital units. Those items that could not readily be answered or that appeared to be ambiguous were either reworded or eliminated. The scores for respondents who thought the quality of care given was excellent or very good were compared with the scores of those who thought the quality of care given was either unsatisfactory or only fair. Scores on the five variables were also compared with those derived from four other questionnaires designed to provide the same type of information, but from a different point of view. The scores were also examined in the context of the type of unit or the kind of staffing pattern used on a unit. Three types of staffing patterns were involved. The first unit had 13 patients assigned to a nursing team; the second had 16 patients assigned to a team; and the third had 19 patients assigned to a nursing team. It was assumed by the respondents that a staffing pattern based on an assignment of 13 patients to a nursing team would ensure an optimal level of quality of nursing care for patients.

No information was provided regarding how many head nurses completed this instrument for how many of their patients. However, those who participated were from a 36-bed surgical unit and a 65-bed medical unit of a 340-bed acute care general hospital operated under municipal control.

Reliability and Validity: No information was provided regarding the test-retest or generalized split-half reliability characteristics of the variables presumably measured by this instrument.

The results for *physical care* indicated a tendency for head nurses under the 13 patients/team staffing pattern to give the highest ratings for patients' care, whereas those under the 16- and 19-patients/team staffing patterns gave lower ratings. The same tendency was observed for the composite score called *quality of nursing care.*

Use in Research: Safford and Schlotfeldt (1960) developed and used this instrument along with four others described elsewhere in this compilation in their research referenced below.

Comments: This instrument appears to have potential for providing information on the variables it is presumed to measure. However, because of the limited nature of the information available regarding the characteristics of the variables, it is premature to make any decisions regarding its usefulness.

Conceptually, the wording of items needs attention; one problem is the fact that many items are written in terms of "did the nurses have time to . . .?" Such wording would seem to measure the respondent's perception of available time to give good care, rather than her/his perception of the quality of that care. In future revisions of the instrument, attention should also be paid to the wording "Were the nurses able to . . .?" Since this is quite different from "Did the nurses . . .?" For example, "Were the nurses able to orient the patients?" versus "Did the nurses orient the patients?"

It would be helpful to have information on the test-retest characteristics of the variables. It would also be helpful to have information on inter-item and between-variable relationships. The latter information could be used to confirm the assignment of items to specific variables and might indicate the presence of variables other than those presumed to be measured by this instrument. After the above information was available, it would be helpful to repeat this study on a much larger sample of patients and head nurses in a number of facilities where a variety of patient staffing patterns was present.

The fact that head nurses indicated the quality of nursing care was best under the 13-patient/team staffing pattern is not surprising, given that this was assumed by these respondents to be the case before the data were collected. It would be helpful, therefore, to try to obtain these data in a design where such a condition was eliminated.

References:

Safford, Beverly J., and Schlotfeldt, Rozella M. Nursing service staffing and quality of nursing care. *Nursing Research*, 1960, *9* (3), 149–154.

Source of Information:
Beverly J. Safford, R.N., M.S.
Caro Regional Center
Caro, Mich. 48723

Instrument Copyright: None.

Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

QUALITY OF NURSING CARE QUESTIONNAIRE--HEAD NURSE

	Always	Usually	Sometimes	Seldom	Never
A. Did the nurses have time to gain an intelligent understanding of the patients' physical status?					
Did the nurses have time to observe the patients' physical needs?					
Did the nurses have time to get to know their patients?					
Were you given accurate information concerning the patients' conditions?					
Did the nurses have time to acquire competence in carrying out their duties?					
Were the nurses able to answer call lights promptly?					
Did the nurses have time to carry out orders for medications and treatments on time?					
Did the nurses have time to notify you promptly of significant changes in the patients' conditions?					
Did the nurses have the time to take adequate precautions to prevent patient injuries?					
Did the patients appear comfortable?					
Did the nurses have time to teach the patients how to care for themselves?					
B. Were the nurses able to orient the patients to their surroundings?					
Did the patients know their nurses?					
Did the nurses have time to give the patients adequate information about what would be happening to them while hospitalized? (Treatments, hospital routines, tests)					

	Always	Usually	Sometimes	Seldom	Never
Did the patients like the nurses?					
Did the nurses have time to attend to the patients' emotional needs?					
Did the nurses have time to attend to the patients' religious needs?					
Did the nurses have time to become interested in their patients?					
Were the nurses sympathetic?					
Were the nurses composed?					
Were the nurses pleasant?					
Did the nurses have time to keep the patients' rooms neat and orderly?					
Did the nurses have time to care properly for the patients?					
Did the nurses have time to supply appropriate information to the patients' families?					
Were patients' families satisfied with the nursing care?					
Were the patients satisfied with the nursing care they were given?					
C. Did the nurses have time to extend appropriate courtesies to the physician?					
Did nurses have time to keep physicians informed of their patient's needs?					
Was a nurse available when needed to assist the physician?					
D. Did the nurses have time to instruct the patients and their families in home care?					
Did the nurses have time to make proper provisions for continued care after discharge, i.e., needed equipment, referrals?					

	Always	Usually	Sometimes	Seldom	Never
E. Did the nurses have time to keep you informed of the patients' progress?					
Did the nurses have time to do satisfactory charting?					
Did the nurses have time to keep the supplies and equipment readily available?					
Did the nurses have time to keep the supplies and equipment in good condition?					
Were relationships among nurses harmonious?					
Did the team seem to work smoothly?					
Were personnel in other teams and other departments congenial with this nursing team?					
Did the staffing seem adequate?					
F. Did the nurses seem to have enough time to complete their assignments?					

Please indicate which term best describes the nursing care given this group of patients in the past week:

Excellent	Very Good	Satisfactory	Only Fair	Unsatisfactory

Additional Comments:

Title: QUALITY OF NURSING CARE QUESTIONNAIRE—LICENSED PRACTICAL NURSE

Authors: Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

Variables: This instrument elicits information on seven variables that address a licensed practical nurse's perceptions of the quality of nursing care provided in a hospital setting. Five of these variables are: physical care, emotional care, nurse-physician relationship, teaching and preparation for home care, and administration. The sixth variable is called the quality of nursing care. The seventh variable is not named, but it provides information on the degree of satisfaction expressed by a licensed practical nurse (LPN) with regard to the nursing care provided for a group of patients. No definitions were provided for these variables.

Description:

Nature and Content: This self-administered instrument consists of 47 questions designed to elicit LPNs' perceptions of the quality of nursing care provided for patients in a hospital setting.

The variables are operationalized by combining responses to various subgroups of questions contained in the instrument. *Physical care* is operationalized by 15 questions; *emotional care* is operationalized by 14 questions; *nurse-physician relationship* is operationalized by three questions; *teaching and preparation for home care* is operationalized by four questions; *administration* is operationalized by 10 questions; and *quality of nursing care* is operationalized by combining the responses to all of the items used in the 5 variables described above. The summary description of the quality of care given is operationalized by one item: "Please indicate which term best describes the nursing care you gave in the past week." A 5-point scale is provided for responses to all of the questions. For 46 of these questions, the five response categories are: always, usually, sometimes, seldom, and never. The five response categories for the item which summarizes the quality of nursing care are: excellent, very good, satisfactory, only fair, and unsatisfactory.

Administration and Scoring: This instrument was designed to be completed by a licensed practical nurse who has provided care for a group of patients. Instructions are provided as part of the questionnaire. Scores for each variable are computed by assigning a number from 1 to 5 for each of the five response categories such that 1=never, 2=seldom, 3=sometimes, 4=usually, and 5=always. The score for a given variable is the average of the responses to the subgroup of questions used to measure that variable. Unanswered questions are assigned a numerical value of 3.

Development:

Rationale: The instrument was developed to provide information on the relationship between hospital staffing patterns and licensed practical nurses' perceptions of the quality of nursing care given to patients.

Source of Items: The items were developed by a committee made up of nursing and hospital administrators, nursing school faculty, staff physicians, head nurses, patients, and the authors.

Procedure for Development: The various groups of persons identified above were asked to indicate what factors were important to good nursing care and to provide examples of each. Their responses were reworded to form statements that could be responded to by licensed practical nurses. The initial form of the instrument was pretested with personnel on two hospital units. Those items that could not be answered readily or that appeared to be ambiguous were either reworded or eliminated. The scores for respondents who thought the quality of care given was excellent or very good were compared with the scores of those who thought the quality of care given was either unsatisfactory or only fair. Scores on the five variables were also compared with those derived from four other questionnaires designed to provide the same type of information but from a different point of view. These were examined in the context of the type of unit or the kind of staffing pattern used on a unit. Three types of staffing patterns were examined. The first had 13 patients assigned to a nursing team; the second had 16 patients similarly assigned to a team; and the third had 19 patients assigned to a nursing team. It was assumed by the respondents that a staffing pattern based on an assignment of 13 patients to a nursing team would ensure an optimal level of quality of nursing care for patients.

No information was provided regarding how many licensed practical nurses completed the questionnaire nor the number of patients for whom they had provided care. However, those nurses who participated were from a 36-bed surgical unit and a 65-bed medical unit of a 340-

bed acute care general hospital operated under municipal control.

Reliability and Validity: No information was provided regarding the test-retest or generalized split-half reliability characteristics of the variables presumably measured by this instrument.

The results for *physical care* indicated a tendency for licensed practical nurses under the 13-patients/team staffing pattern to give the highest ratings for patients' care, whereas, those under the 16- and 19-patients/team staffing patterns gave lower ratings. The same tendency was observed for the composite score called *quality of nursing care.*

Use in Research: Safford and Schlotfeldt (1960) developed and used this instrument along with four others described elsewhere in this compilation in their research referenced below.

Comments: The instrument appears to have potential for providing information on the variables it is presumed to measure. However, because of the limited nature of the information available regarding the characteristics of the variables, it is premature to make any decisions regarding its usefulness. (See also comments on the Head Nurse instrument by the same authors.)

It would be helpful to have information on the test-retest characteristics of the variables. It would also be helpful to have information on inter-item and between-variable relationships. The latter information could be used to confirm the assignment of items to specific variables and might indicate the presence of variables other than those presumed to be measured by this instrument. After the above information was available, it would be helpful to repeat this study on a much larger sample of patients and licensed practical nurses in a number of facilities where a variety of patient staffing patterns was present.

The fact that licensed practical nurses indicated that the quality of nursing care was best under the 13-patients/team staffing pattern is not surprising, given that this was assumed by these respondents to be the case before the data were collected. It would be helpful, therefore, to try to obtain these data in a design where such a condition was eliminated.

References:

Safford, Beverly J., and Schlotfeldt, Rozella M. Nursing service staffing and quality of nursing care. *Nursing Research*, 1960, *9* (3), 149–154.

Source of Information:
Beverly J. Safford, R.N., M.S.
Caro Regional Center
Caro, Mich. 48723

Instrument Copyright: None.

Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

QUALITY OF NURSING CARE QUESTIONNAIRE--LICENSED PRACTICAL NURSE

Please place an X in the space to the right below the word that best describes how you feel about each question at the left. If you have any additional remarks you would like to make, please use the space "Additional Comments" which is provided at the end of the questionnaire.

	Always	Usually	Sometimes	Seldom	Never
A. Were you able to do the little things for your patients that add to their comfort?					
Was there time for treatments and medications to be given on time?					
Was there time for p.r.n. medications to be given promptly?					
Were you able to answer lights promptly?					
Was there time to be accurate in your ministrations to the patients?					
Did you feel adequately prepared to perform the procedures included in your assignment?					
Were you able to use a cotton blanket in bathing your patients?					
Were you able to give thorough nursing care?					
Were you able to give your patients necessary assistance in getting in and out of bed?					
Were you able to take adequate precautions to prevent patient injuries?					
Were you able to take enough time so as not to hurry your patients while caring for them?					
Were you able to see your patients enough to recognize untoward signs and symptoms?					
Was there time to get to know the individual patient's needs?					
Was there time to understand your patients' physical problems?					
Was there time to teach your patients how to care for themselves?					

	Always	Usually	Sometimes	Seldom	Never
D. Was there time to determine what your patients would need for home care?					
Was there time to explain to your patients how to care for themselves at home?					
Were to able to spend enough time with your patients so that you felt confident they understood what was taught them?					
Were you able to spend enough time with your patients and their relatives so that you felt confident they were well-prepared for the patients' discharge and home care?					
E. Did you have the supplies and equipment necessary to give good care?					
Did you feel you were working together as a team?					
Was there sufficient time available for clear explanation of assignments?					
Was there time to carry out your assignments smoothly?					
Did your team leader have time to give you adequate supervision and instruction?					
Was there time to keep your team leader informed of needs and changes of all patients in your care?					
Were team members available when you needed them?					
Were you able to have team conferences?					
Was there time to make real attempts to resolve problems that arose in the care of your patients?					
Were you and your team on congenial terms with the other teams on the unit and other hospital personnel?					

Please indicate which term best describes the nursing care you gave in the past week?

Excellent	Very Good	Satisfactory	Only Fair	Unsatisfactory
______	______	______	______	______

Additional Comments:

	Always	Usually	Sometimes	Seldom	Never
B. Did you enjoy working with this team?					
Was there time to make your new patients feel welcome to the unit?					
Were you able to take time to discover the fears of your patients and to try to relieve them?					
Was there time to help your patients to understand their illnesses?					
Was there time to become interested in your patients and their problems?					
Did you feel relaxed as you worked?					
Was there time to keep your patients' rooms neat and orderly?					
Were you able to give the spiritual needs of your patients adequate consideration?					
Was there time to give your patients as much information as they needed? (treatments, hospital routines and tests)					
Were you able to extend courtesies to your patients' families?					
Were you able to give your patients' families the amount of attention they needed?					
Did you enjoy giving nursing care to your patients?					
Do you feel that your patients enjoyed the nursing care you gave them?					
Was there time to care for your patients properly?					
C. Were to able to extend normal courtesies to physicians?					
Was there time to assist physicians as needed?					
Was there time to learn what the physicians planned for their patients' care?					

Title: QUALITY OF NURSING CARE QUESTIONNAIRE—PHYSICIAN

Authors: Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

Variables: This instrument elicits information on seven variables that address physicians' perceptions of the quality of nursing care provided for their patients. Five of these variables are: physical care, emotional care, nurse-physician relationship, teaching and preparation for home care, and administration. The sixth variable is called the quality of nursing care. The seventh variable is not named, but it seeks information on the degree of satisfaction expressed by a physician regarding the nursing care provided for his(her) patient. No definitions were provided for these variables.

Description:

Nature and Content: This self-administered instrument consists of 40 questions designed to elicit physicians' perceptions of the quality of nursing care provided for their patients in a hospital setting.

The variables are operationalized by combining responses to various subgroups of questions contained in the instrument. *Physical care* is operationalized by 10 questions; *emotional care* is operationalized by 14 questions; *nurse-physician relationship* is operationalized by 3 questions; *teaching and preparation for home care* is operationalized by 4 questions; *administration* is operationalized by 8 questions; *quality of nursing care* is operationalized by combining the responses to all of the items used in the 5 variables described above. The summary description of the quality of care given is operationalized by one item: "Please indicate which term best describes the nursing care given to your patient in the last 7 days." A 5-point scale is provided for responses to 36 of the questions. For 35 of these questions, the five response categories are: always, usually, sometimes, seldom, and never. The five response categories for the item which summarizes the quality of nursing care are: excellent, very good, satisfactory, only fair, and unsatisfactory. Three response categories are provided to obtain information for the four questions that summarize specific aspects of the quality of nursing care. The response categories for these four questions are: yes, partially, and no.

Administration and Scoring: The instrument is self-administered by a physician. Instructions are provided as part of the questionnaire. Scores for each variable are computed by assigning a number from 1 to 5 for each of the five choice response categories such that 1=never, 2=seldom, 3=sometimes, 4=usually, and 5=always. For the three response questions, a numerical value of 1 is assigned to "no," 3 is assigned to "partially," and 5 is assigned to "yes." The score for a given variable is the average of the responses to the subgroup of questions used to measure that variable. Unanswered questions are assigned a numerical value of 3.

Development:

Rationale: The instrument was developed to provide information on the relationship between hospital staffing patterns and physicians' perceptions of the quality of nursing care given to patients.

Source of Items: The items were developed by a committee composed of nursing and hospital administrators, nursing school faculty, staff physicians, head nurses, patients, and the authors.

Procedure for Development: The various groups of persons identified above were asked to indicate what factors were important to good nursing care and to provide examples of each. Their responses were reworded to form statements that could be responded to by physicians. The initial form of this instrument was pretested with personnel on two hospital units. Those items that could not readily be answered or that appeared to be ambiguous were either reworded or eliminated. The scores for respondents who thought the quality of care given was excellent or very good were compared with the scores of those who thought the quality of care given was either unsatisfactory or only fair. Scores on the five variables were also compared with those derived from four other questionnaires designed to provide the same type of information but from a different point of view. And, they were examined in the context of the type of unit or the kind of staffing pattern used on a unit.

No information was provided regarding the number of physicians who completed the questionnaire nor the number of patients involved. However, those who participated were from a 36-bed surgical unit and a 65-bed medical unit of a 340-bed acute care general hospital operated under municipal control.

Reliability and Validity: No information was provided regarding the test-retest or generalized split-half reliability characteristics of the variables presumably measured by this instrument.

The results for *physical care* indicated a tendency for physicians to give higher ratings for their patients on this measure than was the case for other personnel. Physicians typically rated the quality of *physical care* as usually or always adequate. The same tendency was observed for the composite score called *quality of nursing care* and for the variable that provided a summary description of the physician's perceptions of the quality of care received by his(her) patients.

Use in Research: Safford and Schlotfeldt (1960) developed and used this instrument along with four others described elsewhere in this compilation in their research referenced below.

Comments: This instrument appears to have a potential for providing information on the variables it is presumed to measure. However, because of the limited nature of the information available regarding the characteristics of the variables, it is premature to make any decisions regarding its usefulness.

It would be helpful to have information regarding the test-retest characteristics of the variables. It would also be helpful to have information regarding inter-item and between-variable relationships. The latter information could be used to confirm the assignment of items to specific variables and might indicate the presence of variables other than those presumed to be measured by this instrument. After the above information was available, it would be helpful to attempt to repeat this study on a much larger sample of patients and physicians in a number of facilities where a variety of patient staffing patterns was present.

References:

Safford, Beverly J., and Schlotfeldt, Rozella M. Nursing service staffing and quality of nursing care. *Nursing Research*, 1960, *9* (3), 149–154.

Source of Information:

Beverly J. Safford, R.N., M.S.
Caro Regional Center
Caro, Mich. 48723

Instrument Copyright: None.

Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

QUALITY OF NURSING CARE QUESTIONNAIRE--PHYSICIAN

Please place an X in the space to the right below the word that best describes how you feel about each question at the left. If you have any additional remarks you would like to make, please use the space "Additional Comment" which is provided at the end of the questionnaire.

	Always	Usually	Sometimes	Seldom	Never
A. Did the nurses seem to have an intelligent understanding of your patient's physical status?					
Were the nurses alert to your patient's physical needs?					
Did the nurses know their patients?					
Were you given accurate information concerning your patient?					
Were nurses competent in carrying out their duties?					
Were call lights answered promptly?					
Were your orders for treatments and medications carried out on time?					
Were you notified promptly of significant changes in your patient's condition?					
Were adequate precautions taken to prevent patient injuries?					
Did your patient appear comfortable?					
B. Did your patient know his nurses?					
Did the nurses attend to your patient's emotional needs?					
Did the nurses attend to your patient's religious needs?					
Were the nurses interested in your patient?					
Were the nurses sympathetic to your patient?					
Were the nurses composed?					

	Always	Usually	Sometimes	Seldom	Never
Were the nurses pleasant?					
Was your patient's room neat and orderly?					
Did the nurses have time to care properly for your patient?					
Was appropriate information supplied to your patient's family?					
Was the patient's family satisfied with the nursing care?					
Was the patient satisfied with the nursing care he was given?					
C. Did the nurses treat you courteously?					
Were you kept informed of your patient's needs?					
Was a nurse available when you needed her help?					
E. Was the Head Nurse well-informed about your patient?					
Was the charting satisfactory?					
Were supplies and equipment available when you needed them?					
Were the supplies and equipment that you used in good condition?					
Were relationships among nurses harmonious?					
Did the team seem to work smoothly?					
Were the personnel in other teams and other departments congenial with the nursing team?					
Did the staffing seem adequate?					

	Yes	Partially	No
F. Was your patient taught how to care for himself?			
Was your patient oriented to his surroundings?			
Were your patient and his family instructed for home care?			
Were provisions made by the nurse for continued care after discharge? (arranging referrals, needed supplies and equipment)			

Please indicate which term best describes the nursing care given to your patient,

______________________________ in the last seven days.

Excellent	Very Good	Satisfactory	Only Fair	Unsatisfactory
________	________	________	________	________

Additional Comments:

Title: QUALITY OF NURSING CARE QUESTIONNAIRE—REGISTERED NURSE

Authors: Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

Variables: This instrument elicits information on seven variables that address a registered nurse's perceptions of the quality of nursing care provided for patients in a hospital setting. Five of these variables are: physical care, emotional care, nurse-physician relationship, teaching and preparation for home care, and administration. The sixth variable is called the quality of nursing care. The seventh variable is not named, but it seeks information regarding the degree of satisfaction expressed by a registered nurse concerning the nursing care provided for a group of patients. No definitions were provided for the variables.

Description:

Nature and Content: This self-administered instrument consists of 49 questions designed to elicit from registered nurses their perceptions of the quality of nursing care provided for patients in a hospital setting.

The variables are operationalized by combining responses to various subgroups of questions contained in this instrument. *Physical care* is operationalized by 14 questions; *emotional care* is operationalized by 14 questions; *nurse-physician relationship* is operationalized by 3 questions; *teaching and preparation for home care* is operationalized by 4 questions; *administration* is operationalized by 12 questions; and *quality of nursing care* is operationalized by combining the responses to all of the items used in the 5 variables described above. The summary description of the quality of care given is operationalized by one item: "Please indicate which term best describes the nursing care you gave in the past week." A 5-point scale is provided for responses to 36 of the questions. For 48 of these questions, the 5 response categories are: always, usually, sometimes, seldom, and never. The five response categories for the item which summarizes the quality of nursing care are: excellent, very good, satisfactory, only fair, and unsatisfactory.

Administration and Scoring: This instrument was designed to be completed by a registered nurse who has provided care for a group of patients. Instructions are provided as part of the questionnaire. Scores for each variable are computed by assigning a number from 1 to 5 for each of the five choice response categories such that 1=never, 2=seldom, 3=sometimes, 4=usually, and 5=always. The score for a given variable is the average of the responses to the subgroup of questions used to measure that variable. Unanswered questions are assigned a numerical value of 3.

Development:

Rationale: The instrument was developed to provide information on the relationship between hospital staffing patterns and registered nurses' perceptions of the quality of nursing care provided for patients.

Source of Items: The items were developed by a committee which consisted of nursing and hospital administrators, nursing school faculty, staff physicians, head nurses, patients, and the authors.

Procedure for Development: The various groups of persons identified above were asked to indicate what factors were important to good nursing care and to provide examples of each. These responses were reworded to form statements that could be responded to by registered nurses. The initial form of the instrument was pretested with personnel on two hospital units. Those items that could not be answered readily or that appeared to be ambiguous were either reworded or eliminated. The scores for respondents who thought the quality of care given was excellent or very good were compared with those who thought the quality of care given was either unsatisfactory or only fair. Scores on the five variables were also compared with those derived from four other questionnaires designed to provide the same type of information but from a different point of view. These were examined in the context of the type of unit or the kind of staffing pattern used on a unit. Three types of staffing patterns were examined. The first had 13 patients assigned to a nursing team. The second had 16 patients similarly assigned to a team; and the third had 19 patients assigned to a nursing team. It was assumed by the respondents that a staffing pattern based on an assignment of 13 patients to a nursing team would ensure an optimal level of quality of nursing care for patients.

No information was provided regarding how many registered nurses completed the instrument nor the number of patients for whom they had provided care. However, those who participated were from a 36-bed surgical unit and a 65-bed medical unit of a 340-bed acute care general hospital operated under municipal control.

Reliability and Validity: No information was provided regarding the test-retest or generalized split-half reliability characteristics of the variables presumably measured by this instrument.

The results for *physical care* indicated a tendency for registered nurses under the 13-patients/team staffing pattern to give the highest ratings for patients' care, whereas those under the 16- and 19-patients/team staffing patterns gave lower ratings. The same tendency was observed for the composite score called *quality of nursing care*.

Use in Research: Safford and Schlotfeldt (1960) developed and used this instrument along with four others described elsewhere in this compilation for their research referenced below.

Comments: This instrument appears to have a potential for providing information on the variables it is presumed to measure. However, because of the limited nature of the information available regarding the characteristics of the variables, it is premature to make any decisions regarding its usefulness. (See also comments on the Head Nurse instrument by the same authors.)

It would be helpful to have information regarding the test-retest characteristics of the variables. It would also be helpful to have information regarding inter-item and between-variable relationships. The latter information could be used to confirm the assignment of items to specific variables and might indicate the presence of variables other than those presumed to be measured by this instrument. After the above information was available, it would be helpful to repeat this study on a much larger sample of patients and registered nurses in a number of facilities where a variety of patient staffing patterns was present.

The fact that registered nurses indicated that the quality of nursing care was best under the 13-patient/team staffing pattern is not surprising, given that this was assumed by these respondents to be the case before the data were collected. It would be helpful, therefore, to seek this information in a design where such a condition was eliminated.

References:

Safford, Beverly J., and Schlotfeldt, Rozella M. Nursing service staffing and quality of nursing care. *Nursing Research*, 1960, *9* (3), 149–154.

Source of Information:

Beverly J. Safford, R.N., M.S.
Caro Regional Center
Caro, Mich. 48723

Instrument Copyright: None.

Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

QUALITY OF NURSING CARE QUESTIONNAIRE--REGISTERED NURSE

Please place an X in the space to the right below the word that best describes how you feel about each question at the left. If you have any additional remarks you would like to make, please use the space "Additional Comments" which is provided at the end of the questionnaire.

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
A. Were you able to do the little things for your patients that add to their comfort?					
Was there time for treatments and medications to be given on time?					
Was there time for p.r.n. medications to be given promptly?					
Was there time to be accurate in your ministrations to the patients?					
Did you feel adequately prepared to perform the procedures included in your assignment?					
Were you able to use a cotton blanket in bathing your patients?					
Were you able to give thorough nursing care?					
Were you able to give your patients necessary assistance in getting in and out of bed?					
Were you able to take adequate precautions to prevent patient injuries?					
Were you able to take enough time so as not to hurry your patients while caring for them?					
Were you able to see your patients enough to recognize untoward signs and symptoms?					
Was there time to get to know the individual patient's needs?					
Was there time to understand your patients' physical problems?					
Was there time to teach your patients how to care for themselves?					
B. Did you enjoy working with this team?					
Was there time to make new patients feel welcome on the unit?					

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
Were you able to take time to discover the fears of your patients and to try to relieve them?					
Was there time to help your patients to understand their illnesses?					
Was there time to become interested in your patients and their problems?					
Did you feel relaxed as you worked?					
Was there time to protect the privacy of your patients?					
Was there time to keep your patients' rooms neat and orderly?					
Were you able to give the spiritual needs of your patients adequate consideration?					
Was there time to give your patients as much information as they needed? (treatments, Hospital routines and tests)					
Were you able to extend courtesies to patients' families?					
Were you able to give your patients' families the amount of attention they needed?					
Did you enjoy giving nursing care to your patients?					
Do you feel that your patients enjoyed the nursing care you gave them?					
Was there time to care for your patients properly?					
C. Were you able to extend normal courtesies to physicians?					
Was there time to assist physicians as needed?					
Was there time to learn what the physicians' plans were for their patients' care?					
D. Was there time to determine what your patients would need for home care?					
Was there time to explain to your patients how to care for themselves?					

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
Were you able to spend enough time with your patients so that you felt confident they understood what was taught them?					
Were you able to spend enough time with your patients and their relatives so that you felt confident they were well-prepared for the patients' discharge and home care?					
E. Did you have the supplies and equipment necessary to give good care?					
Did you feel you were working together as a team?					
Was there sufficient time available for clear explanation of your assignments?					
Was there time to carry out assignments smoothly?					
Was there time to give adequate instruction and supervision to your team members?					
Were team members able to keep you informed of needs and changes in their patients?					
Were your team members available when you needed their help?					
Were you able to have team conferences?					
Was there time to make real attempts to resolve problems that arose in the care of your patients?					
Were you and your team on congenial terms with the other teams on the unit and other hospital personnel?					
F. Were you able to discuss your patients' problems with the physicians?					
Were you able to keep physicians informed as to their patients' progress?					

Please indicate which term best describes the nursing care you gave in the past week:

Excellent	Very Good	Satisfactory	Only Fair	Unsatisfactory
________	________	________	________	________

Additional Comments:

Title: IMPORTANCE OF NURSING ACTIONS OPINIONNAIRE

Author: Walker, Laura C.

Variable: Respondents' perceptions of the relative importance of 16 specific nursing actions relative to patients is the variable studied.

Description:

Nature and Content: This instrument is a modified Q-sort technique comprised of an "opinionnaire" and 16 numbered statements which describe actions of nurses relative to patients. Each statement is on a separate piece of paper and numbered for the sake of recording (not to indicate its relative value or rank). Respondents are asked to sort the statements into three piles: one pile containing nursing actions which the respondent considers most important, very good, and highly desirable; one pile containing nursing actions which the respondent considers important, good, and desirable; and one pile containing nursing actions which the respondent considers not very important, questionably good, and least desirable. The respondent is then asked to record the number of slips in each pile. Following that step, the respondent is asked to sort the slips into eight piles according to specified directions, then to record on the opinionnaire the number of each slip in the space on a diagram provided on the opinionnaire.

Sample items are: "(2) Comforts the patient: being with, listening to, showing concern for, and explaining things; (5) Enforces hospital routines and promptly executes medical orders; acts in the interest of patient safety and protection from environmental hazards; (12) Promotes a pleasant, hopeful, and optimistic attitude by a professional manner. Is calm and confident in difficult situations, avoids embarrassing the patient; (14) Skillful in teaching patient and encourages the patient to assume responsibility for own health practices. Strengthens self-realization and self-worth."

Administration and Scoring: The researcher must be familiar with the instrument's directions. The author stated that approximately 15 minutes are required to explain the procedure to the respondent, and directions for the procedure are on the opinionnaire sheet itself. Approximately 15-20 minutes are required for the respondent to complete the task.

Each item is scored as the numerical inverse of its rank, i.e., rank 1=score 16, rank 2=score 15, rank 3=score 14, . . . rank 16=score 1.

The instrument per se is not scored.

Development:

Rationale: The practice of nursing may be regarded as a group process of human interaction occurring in a patient unit of a hospital, which is a unique social system. In the usual operational process of bedside nursing practice, the nurse decides what she will do, when she will act, and how her services will be administered. When nurses and members of other reference groups agree that a nurse's action toward a patient is desirable, they judge the nurse to be competent.

Source of Items: The items were based upon a review of the literature and the experience of the author and her peers.

Procedure for Development: Research literature in nursing and articles in professional periodicals and journals that dealt with bedside care of patients were reviewed and analyzed for identification of specific items or actions of a nurse toward patients. The items obtained from the literature were supplemented by personal experiences of the author, reported actions from the experiences of other nurses, and experiences of the author's friends who had been hospital patients. A set of items was developed and submitted to five nurses and five nonnurse friends of the author for review as to clarity of meaning. Four items were developed for each of four elements of the conceptual framework by which nursing actions could be described. These four elements had been identified by the author as: (1) consideration, (2) domination, (3) animation, and (4) production. A psychologist reviewed the items, and based upon his suggestions, the items were revised and reevaluated by the author. The instrument was pretested by six graduate students, and one change was made in the instrument as a result of that trial.

Reliability and Validity: No reliability or validity information was available.

Use in Research: Walker developed and used the instrument in her doctoral research, "A Model for Decision-Making in Nursing Administration" (Copple, 1960). Her respondent sample included 100 nurses representing 5 specialty groups in nursing practice and 100 members of 5 reference groups of nursing (20 patients, 20 patients' family members, 20 physicians, 20 hospital administrators, and 20 hospital governing board members).

Comments: This instrument represents one method of approach for studying perceptions of the importance of nursing actions. Many of the

16 items are complex, i.e., include more than one thought or idea. This problem could be addressed by rewording the items into simple declarative sentences so that each contained only one thought or idea.

References:

Copple, Laura O. *A model for decision-making in nursing administration.* Unpublished doctoral dissertation, University of Chicago, 1960.

Seager, Roger. *The task of the public school as perceived by proximity sub-publics.* Unpublished doctoral dissertation, University of Chicago, 1959.

Stogdill, Ralph, and Coons, Alvin (Eds.). *Leader behavior: Its description and measurement.* Columbus, Ohio: Ohio State University, 1957.

Source of Information:

Laura Copple Walker, R.N., Ph.D.
School of Nursing
Montana State University
Bozeman, Montana 59715

Instrument Copyright: None.

Walker, Laura C.

IMPORTANCE OF NURSING ACTIONS OPINIONNAIRE

Instructions for Completion of Opinionnaire

Almost everyone has an opinion as to how a nurse should act toward her patient. On these slips of paper you will see sixteen ways in which nurses have been seen to act toward their patients. No doubt some of the actions are better, more important, and more highly desirable than others. In fact, you will soon see that one nurse could hardly act in all these ways toward one patient. But I'm sure that many of these acts will seem quite familiar to you as you recall your experiences with nurses and patients. Will you please sort them through and rank them as you believe a good nurse should act. (The number assigned to each item has no significance other than it identifies the item.)

First, make three piles of slips:

1. Acts which are most important, very good, and highly desirable.
2. Acts which are important, good, and desirable.
3. Acts which are not important, questionably good, and least desirable.

Record the number on the slips in each pile. (The sequence of the numbers doesn't matter.)

Pile 1 Pile 2 Pile 3

Second, now sort the slips into eight piles in this manner:

1. The one most desirable act.
2. The two next desirable acts.
3. The two next most desirable acts.
4. The three next most desirable acts.
5. The three next most desirable acts.
6. The two next desirable.
7. The two next least desirable.
8. The one least desirable.

Now, write the numbers of each of your slips on its square in the diagram below:

Most Desirable Least Desirable

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐ ☐

☐ ☐

☐ Physician

☐ Patient

☐ Patient family member

☐ Nurse

☐ Hospital administrator

☐ Hospital board member

1. Does things for the patient the way he would do for himself, so he doesn't have to accommodate to more changes than necessary while he is ill.

2. Comforts the patient: being with, listening to, showing concern for and explaining things.

3. Friendly and approachable: looks out for personal welfare of patient, does small favors, respects idiosyncrasies.

4. Respects patient's personal freedom and individual human rights when giving nursing care: patient encouraged to express personal choices and preferences.

5. Enforces hospital routines and promptly executes medical orders: acts in the interest of patient safety and protection from environmental hazards.

6. Protects the good and well being of the patient by restricting his decision-making and limiting his activities--visiting, reading, radio, TV.

7. Rewards appropriate patient behavior and makes known his disapproval of undesirable patient behavior. Helps patient learn to be a patient.

8. Utilizes professional judgement to evaluate patient's capacity and competence for self care: encourages self-reliance and self-confidence.

9. Displays interest and energy when giving nursing care: talks about things of interest to the patient. Doesn't complain to the patient.

10. Expresses solicitude and observes precautions without producing patient fear and anxiety. (Isolation, pre-operation, oxygen or other special equipment.)

11. Pays attention to the patient and makes him feel well care speaks or gives other response or recognition on entering the patient's room.

12. Promotes a pleasant, hopeful and optimistic attitude by a professional manner. Is calm and confident in difficult situations, avoids embarrassing the patient.

13. Organizes her own activities in ways which give precedence to meeting the most important needs of the patient.

14. Skillful in teaching patient and encourages the patient to assume responsibility for own health practices. Strengthens self realization and self worth.

15. Sets a reasonable level of work achievement for self: observes professional standards and the institution's nursing policies.

16. Patients' criticisms and special requests are taken care of (reported and recorded). Patient informed as to action taken by nurse.

Provider-Client Interaction: Client's Perception of Provider, Client Care, and Health Services

Title: CHECKLIST FOR PATIENTS

Authors: Abdellah, Faye G., and Levine, Eugene

Variables: This instrument provides information on seven variables. These variables are called: events indicating satisfaction with care, rest and relaxation, dietary needs, elimination, personal hygiene and supportive care, reaction to therapy, and contact with nurses. (See also "Checklist for Personnel" by the same authors.)

Description:

Nature and Content: This instrument is made up of 50 questions which describe a variety of events that may happen to a patient during a typical day in a hospital. Only events that relate to the nurse-patient relationship are included in the set of questions. A 3-point response scale is used to capture patient responses to each question. The response categories on the scale are coded "This happened today," "This happened some other day," and "This did not happen." The instrument also has a space for the respondent to write any additional comments about his(her) experiences in the hospital.

The Checklist for Patients is scored in the following fashion:

1. If a respondent made a checkmark in either or both of the first 2-scale response categories ("This happened today," or "This happened some other day"), then that event is coded 1. If the respondent made a checkmark in the third category ("This did not happen"), then that event is coded 2. If no response is made to a particular event, then a code 9 is used.

2. The number and percent of respondents who had a score of 1 are then computed for each question. Since the last six questions (47–52) are less likely to happen, the percentage for these items is not based on the total number of respondents. Rather, only the total number of persons who had a response coded either 1 or 2 is used to compute these percentages.

3. The percentage figures are then placed within the respective seven areas in such a way that the event having the highest percentage is placed at the top, and the one having the lowest percentage is placed at the bottom of the list. The percentages for items 4, 20, and 38 are listed under *events indicating satisfaction with care.* Similarly, those for items 8, 13, 18, 23, 24, 27, 31, and 44 are listed under *rest and relaxation. Dietary needs* contains the results for items 5, 11, 12, 19, 32, and 36. *Elimination* contains the results for items 9, 15, 26, and 39. The percentages for items 10, 16, 17, 22, 28, 30, 33, 42, 43, and 50 are grouped together for providing information about *personal hygiene and supportive care. Reaction to therapy* contains the results for items 3, 6, 29, 45, 47, 48, 51, and 52. And *contact with nurses* contains the results of 7, 14, 21, 25, 34, 35, 37, 40, 41, 46, and 49.

The variables are operationalized by grouping responses to the various subsets of questions into a score for each variable. *Events indicating satisfaction with care* is operationalized by responses to three statements such as "My call for a nurse was answered very promptly." *Rest and relaxation* is operationalized by responses to six statements such as "Bedpan was handled too noisily." *Dietary needs* is operationalized by responses to six statements such as "Food was served in a hurry." *Elimination* is operationalized by responses to four statements such as "Bathroom was not clean." *Personal hygiene and supportive care* is operationalized by 10 statements such as "Bed was not made right." *Reaction to therapy* is operationalized by responses to eight statements such as "My bandage or dressing was too tight." *Contact with nurses* is operationalized by responses to 11 statements such as "Nurse left before I could ask her questions."

Administration and Scoring: The Checklist for Patients is given to all the patients in a hospital to fill out on a specific day. This instrument is designed to be used in conjunction with the Checklist for Personnel (Abdellah and Levine, 1957a), and both instruments are to be completed by the respective respondents on the same day. Written instructions are provided as part of the instrument.

If a total score across all items is desired, then one would count the number of items coded with 1. This score could range from 0 to 50, where a low score would mean the most desirable situation.

High rates of occurrence are assumed to mean a potential problem exists. However, no information is provided as to how "high" a percentage must be before it denotes a significant problem.

A second scoring procedure that is used to provide group-type data involves multiplying an item response with an item weight which can vary from 1 to 5. The item weights for each item, respectively, are as follows: 1=NA, 2=NA, 3=5, 4=NA, 5=1, 6=2, 7=5, 8=2, 9=4, 10=3, 11=2, 12=3, 13=2, 14=3, 15=4, 16=3, 17=4, 18=4, 19=4, 20=NA, 21=2, 22=3, 23=3, 24=3, 25=3, 26=4, 27=4, 28=2, 29=3, 30=4, 31=1, 32=1, 33=3, 34=3, 35=2, 36=4, 37=2, 38=NA, 39=5, 40=4, 41=3, 42=4, 43=2, 44=3, 45=3, 46=2, 47=3, 48=4, 49=3, 50=2, 51=3, 52=3. When this procedure is used, the final score for a group of patients on any one of the seven variables is a percent and thus has a range of from 0 to 100. A low score again means a more desirable situation. This weighted category score is computed in three steps:

1. Multiply the number of respondents who checked a particular item by the item weight for that item. Do this for all the items in that area and add up the results for each item.
2. Add up the item weights for all the items in a given area and multiply by the total number of patients who took the checklist.
3. Divide the number from step 1 by the number from step 2 and multiply by 100.

Development:

Rationale: This instrument was developed to provide information about the factors related to how patients feel about the nursing care provided them when they are in a hospital. This specific test was developed because the available alternative instruments did not adequately meet the following eight criteria:

"1. measures satisfaction with nursing care from patients' and personnel's points of view,
2. provides data that can be quantified and handled statistically,
3. provides a sensitive and reliable measure of satisfaction,
4. reports what happened in a way that can be validated,
5. stimulates frank responses,
6. does not rely too heavily on memory of respondent,
7. provides information about specific components of patient care that can form the basis for constructive action,
8. can be administered quickly and without difficulty to a very large group of respondents" (Abdellah and Levine, 1957a).

Source of Items: There were several phases in the development of this instrument. During the first phase, a team made up of a psychologist, a nurse, and a statistician visited personnel and patients in three hospitals that volunteered to participate in this effort. During this phase, lists of specific occurrences of nursing care that could be observed were developed. Instructions to patients were to "list events of care you have received that were either satisfactory or unsatisfactory" (Abdellah and Levine, 1957a). Personnel were asked to list events of "patient care that should have been provided and was not, as well as instances in which patient care might have been improved" (Abdellah and Levine, 1957a).

The sample from each of the three hospitals was made up of 100 patients and all nursing and medical personnel in 3 hospitals. Sixty of the patients were asked to provide this information four times a day for up to 7 days. The remaining 40 patients were asked to do the above, and were also interviewed by the team, either individually or in groups, in order to elicit information about other events and get more details about those already reported.

In the second phase of the development effort, 100 events were selected from those compiled during the first phase. These events, which had a higher frequency of occurrence than those not selected, were then placed in a list and a 4-point response scale was provided for patient responses. Patients were asked to indicate the time period during which an event had occurred: before breakfast, breakfast to lunch, lunch to dinner, after dinner. These checklists were given to all patients in the same three hospitals as before. In addition, some patients were asked to indicate how important each event was in relationship to patient satisfaction with the health care received. A 5-point response scale, ranging from "not important" to "very important," was used to gather this information.

In the third phase of the development effort, 50 events were selected from the 100 used in phase two. These events were selected either or both in terms of their having a higher frequency of occurrence or as having been rated as having more importance to patients. All nonnursing related events were also deleted from this set of questions. These questions were given to a new sample of patients at a research hospital, and some of these patients were interviewed to remove any remaining ambiguity from words or phrases in the checklist. Each item was also checked against Payne's list of words (Payne, 1951). During this phase, the response scale was also modified so as to have the following three categories: "this happened today," "this happened some other day," and "this did not happen."

In the fourth phase of this effort, the final version of the Checklist for Patients was given to 40 patients in 2 hospitals not previously involved in this effort. These patients were also asked to Q–sort the 50 statements so that 3 were most and 3 were least important, 12 were the next most and the next least important, and the remaining 20 were in the middle. A weight of 5, 4, 3, 2, and 1 was then assigned to each of the 50 statements, based on the average sorting of these events by the patients.

In the final phase of this effort, the Checklist for Patients was given to all patients in a sample of 60 hospitals located in Illinois, Indiana, Michigan, New Jersey, New York, Ohio, and Wisconsin.

Reliability and Validity: No information is provided about the test-retest or split-half type reliability characteristics of this instrument.

No statistical information is provided about the validity characteristics of this test. However, attempts were made to confirm the accuracy of patient responses by determining whether or not the reported events actually occurred. The authors report a high degree of confirmation of the reported events (Abdellah and Levine, 1957a). In addition, the total scores generated from the test were examined to see if they agreed with patient feelings of overall satisfaction with the hospital in which they received health care. Those hospitals in which the interviews indicated the least satisfaction with the health care received were also those that had a greater number of events checked on the instrument (Abdellah and Levine, 1957a). The authors also indicate that "The hospital that had the most favorable scores on the checklists was providing the smallest number of total nursing hours per patient day . . . [but] . . . that the professional nursing hours in this hospital were much higher than in the other two hospitals participating in the study" (Abdellah and Levine, 1957a). It was also reported that patients and personnel tended to rate the same events as important (Abdellah and Levine, 1957a). Finally, the authors report that younger patients are apt to check more events on the instrument than do older patients (Abdellah and Levine, 1957a).

Use in Research: Since its development, the instrument itself, or adaptations of it, have been widely used to assess nursing care from the perspective of patients and from the perspective of health care personnel.

Comments: This instrument appears easy to administer and score. Preliminary results suggest that the scores are likely to be congruent with similar information gathered from other sources and are, therefore, likely to be valid.

However, it would be desirable to gather information on the inter-item characteristics of the test. These results could then be used to confirm the placement of the items within subgroups and to increase the accuracy of the information produced from them. Also, because nursing practice has changed since 1957 when this instrument was developed, some items may no longer be relevant or significant events related to the nurse-patient relationship.

It would also be useful to gather data that could be used to help differentiate between items or groups of items that warrant remedial efforts versus items where the cost benefit of remedial efforts would not be sufficiently high.

Finally, since the weights derived from a Q–sort procedure typically reflect only the opinions of a majority of the persons in a sample, it would be useful to devise a scoring procedure that simply reflects the presence or absence of a certain number of checks within a subgroup of items. This pattern could then be examined to see if enough checks were present, across patients, to warrant the development of remedial procedures.

References:

Abdellah, Faye G., and Levine, Eugene. Developing a measure of patient and personnel satisfaction with nursing care. *Nursing Research*, 1957a, 5, 100–108.

______. *Patients and personnel speak.* Washington, D.C.: U.S. Public Health Service, Publication No. 527, 1957b. Revised 1964.

Payne, S. E. *The art of asking questions.* Princeton, N.J.: Princeton University Press, 1951.

Source of Information:
Patients and Personnel Speak
PHS Pub. No. 527 (Rev. 1964)

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U.S. Dept. of Commerce
Springfield, VA 22161
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Abdellah, Faye G., and Levine, Eugene

CHECKLIST FOR PATIENTS

HOSPITAL NAME AND ADDRESS

TO OUR PATIENTS:

Today this hospital is making a study to find out how to give *better nursing care* to you, and to all patients in the future.

On the following pages we have listed things which *may* have happened to you while you have been here. We are asking all patients who are well enough to *help the hospital* and *help the nurses* by checking these items.

1. Read each item carefully.

2. If something *did happen* today, put a check in the box which says, "This happened today." If it did *not* happen today, but *did happen* some other day *during this stay* in the hospital, put a check in the box which says, "This happened some other day." (You may have to check both boxes in some cases.)

If it *did not happen* during this stay in the hospital, then check the box which says, "This did *not* happen."

3. Do not sign your name.

4. Put your completed form in the envelope and seal it.

5. If there is something you want to say which is not included, please write it on the last page.

Please be frank. Your frank answers added to all other patients' will help the hospital get more help for our nurses.

PATIENTS: PLACE CHECK MARKS IN APPROPRIATE BOXES FOR ALL STATEMENTS	DURING MY PRESENT STAY IN THIS HOSPITAL		
	THIS HAPPENED TODAY	THIS HAPPENED SOME OTHER DAY	THIS DID NOT HAPPEN
(Examples)			
1 Radio or TV noisy	✓	✓	
If a radio or TV was noisy today, you would check "this happened today." If noisy some other day *during your present stay* in this hospital, you would check "this happened some other day." If noisy *both* today *and* some other day, you would check *both* boxes.			
2 My bath was not given on time.			✓
If your bath was always given on time during your *present stay* in this hospital, you would check this statement in the third box.			
3 Couldn't get anything from the nurse for pain.			
4 My call for a nurse was answered very promptly.			
5 Food trays left in front of me too long.			
6 Thermometer left in too long.			
7 No answer to call for a nurse for a long time.			
8 Bedpan was handled too noisily.			
9 Bedpan was left with me too long.			
10 Nurse or aide didn't leave me clean towels.			
11 Food was served in a hurry.			
12 Drinking water wasn't changed.			
13 Other patients made disturbing noises.			
14 Nurse left before I could ask her questions.			
15 Had to wait too long for a bedpan.			
16 My nurse left me alone too long when I was allowed up.			
17 There was no one to feed me when I needed help.			
18 Room was too chilly or too warm to sleep.			
19 Not propped up, making it hard to enjoy my meal.			
20 My nurse explained my care to me.			
21 Nurse wanted me to do too much for myself.			

		DURING MY PRESENT STAY IN THIS HOSPITAL		
	PATIENTS: PLACE CHECK MARKS IN APPROPRIATE BOXES FOR ALL STATEMENTS	THIS HAPPENED TODAY	THIS HAPPENED SOME OTHER DAY	THIS DID NOT HAPPEN
22	I was not bathed as thoroughly as I would like.			
23	Light was too bright when I tried to sleep.			
24	There was too much noise in the hall.			
25	Nurses didn't seem interested in me.			
26	Bathroom was not clean.			
27	Radios, TV's or record players were played too loudly.			
28	Bed was not made right.			
29	My bath, meal or rest period interrupted by treatment.			
30	Had to get out of bed to take a bath even though I felt bad.			
31	Got waked up too early for temperature taking.			
32	Was not served milk or fruit juice after I requested it.			
33	Room in general was not made neat and orderly.			
34	My nurse is always in a hurry.			
35	My nurse wouldn't tell me what was wrong with me.			
36	My food was cold when served.			
37	My nurse did not tell me anything about my treatment.			
38	My nurse was especially nice to me.			
39	Had to wait a long time to use the bathroom.			
40	Nurse was unfriendly.			
41	Didn't see a nurse often enough.			
42	Bed was not changed when needed.			
43	Nurse did not wash and rub my back well.			
44	Air in room was poor.			
45	Didn't get my medicine until late.			
46	My aide is always in a hurry.			

PATIENTS: PLACE CHECK MARKS IN APPROPRIATE BOXES FOR ALL STATEMENTS

SOME OF THE FOLLOWING STATEMENTS COULD HAVE HAPPENED ONLY TO SOME PEOPLE. PLEASE CHECK ANY STATEMENT WHICH APPLIES TO YOU. LEAVE THE OTHERS BLANK:

		DURING MY PRESENT STAY IN THIS HOSPITAL		
		THIS HAPPENED TODAY	THIS HAPPENED SOME OTHER DAY	THIS DID NOT HAPPEN
47	My bandage or dressing was too tight.			
48	No one checked needle in my arm to see that fluid was running.			
49	I was not told when I would be operated on.			
50	Asked for a wheelchair and didn't get one.			
51	Asked for a heat lamp but I never got it.			
52	My bed got wet from treatment.			

ADDITIONAL COMMENTS:

Title: CHECKLIST FOR PERSONNEL

Authors: Abdellah, Faye G., and Levine, Eugene

Variables: This instrument provides information on nine variables: administering therapy to patients, carrying out work assignments, providing needed supportive care to patients, contacting patient's family and friends, providing needed help and equipment for elimination, providing for needed comfort and safety measures, meeting the patient's aesthetic needs, providing for an atmosphere conducive to rest and relaxation, and providing needed nourishment for the patient. (See also "Checklist for Patients" by the same authors.)

Description:

Nature and Content: This instrument is made up of 50 questions which describe a variety of events that may happen to a patient during a typical day in a hospital. Only events that relate to the nurse-patient relationship are included in the set of questions. A 3-point response scale is used to capture patient and personnel responses to each question. The response categories on the scale are coded "This happened today," "This happened some time during the last 7 days," and "Did not happen during the last 7 days." The instrument also has a space for the respondent to write any additional comments about his(her) experiences in the hospital.

The variables are operationalized by grouping responses to the various subsets of questions into a score for each variable. *Administering therapy to patients* is operationalized by responses to 19 statements such as "Dressing not changed at proper time." *Carrying out work assignments* is operationalized by responses to six statements such as "Nurse given too much work to do." *Providing needed supportive care to patients* is operationalized by responses to three statements such as "Patient not informed about treatment or medication." *Contacting patient's family and friends* is operationalized by responses to one statement: "Visitors interfered with treatments or medications." *Providing needed help and equipment for elimination* is operationalized by responses to three statements such as "Patient given cold bedpan." *Providing for needed comfort and safety measures* is operationalized by responses to three statements such as "Soiled bed not changed promptly." *Meeting the patient's aesthetic needs* is operationalized by responses to three statements such as "Patient had to wait too long for bath." *Providing for an atmosphere conducive to rest and relaxation* is operationalized by responses to four statements such as "Patient making noise disturbed other patients." *Providing needed nourishment for the patient* is operationalized by responses to eight statements such as "Patient did not get fresh drinking water."

Administration and Scoring: The Checklist for Personnel is given to all personnel in a hospital to fill out on a specific day. This instrument is designed to be used in conjunction with the Checklist for Patients (Abdellah and Levine, 1957a) and both instruments are to be completed by the respective respondents on the same day. Written instructions are provided as part of the instrument.

The Checklist for Personnel is scored in the following fashion:

1. If a respondent made a checkmark in either or both of the first 2-scale response categories ("This happened today," or "This happened sometime during the last 7 days"), then that event is coded 1. If the respondent made a checkmark in the third category ("This did not happen during the last 7 days"), then that event is coded 2. If no response is made to a particular event, then code 9 is used to denote no response.

2. The number and percent of respondents who had a score of 1 are then computed for each question.

3. The percentage figures are then placed within the respective nine areas in such a way that the event having the highest percentage is placed at the top and the one having the lowest percentage is placed at the bottom of this list. The percentage for items 1, 2, 3, 5, 8, 9, 10, 13, 17, 23, 25, 26, 31, 34, 35, 37, 38, 45, and 49 are listed for *administering therapy to patients.* Similarly, those for items 4, 21, 22, 29, 30, and 33 are listed under *carrying out work assignments. Providing needed supportive care to patients* contains the results for items 19, 27, and 50. Only the results for item 24 are displayed under *contacting patient's family and friends.* The percentages for items 28, 42, and 44 are grouped together under *providing needed help and equipment for elimination.* The results for items 12, 16, and 40 are displayed under *providing for needed comfort and safety measures.* Similarly, the results for items 18, 32, and 36 are grouped together under *meeting the patient's aesthetic needs.* Providing for an *atmosphere conducive to rest and relaxation* contains the results for items 6, 14, 43, and 47. The percentage for items 7, 11, 15, 20, 39, 41,

46, and 48 are grouped together under *providing needed nourishment for the patient.*

If a total score across all items is desired, then one would count the number of items coded 1. This score could range from 0 to 50, where a low score would mean the most desirable situation.

High rates of occurrence are assumed to mean a potential problem exists. However, no information is provided as to how "high" a percentage must be before it denotes a significant problem.

A second scoring procedure that is used to provide group type data involves multiplying an item response with an item weight which can vary from 1 to 5. The item weights for each item respectively, are as follows: 1=3, 2=4, 3=5, 4=3, 5=3, 6=2, 7=2, 8=5, 9=4, 10=5, 11=3, 12=3, 13=4, 14=3, 15=3, 16=2, 17=3, 18=3, 19=4, 20=4, 21=3, 22=4, 23=3, 24=2, 25=4, 26=2, 27=3, 28=3, 29=4, 30=2, 31=4, 32=1, 33=3, 34=3, 35=3, 36=3, 37=4, 38=4, 39=2, 40=4, 41=2, 42=1, 43=2, 44=3, 45=3, 46=2, 47=1, 48=2, 49=2, 50=4. When this procedure is used, the final score for a group of personnel on any one of nine variables is a percent and thus has a range of from 0 to 100. A low score again means a more desirable situation. This weighted category score is computed in three steps:

1. Multiply the number of respondents who checked a particular item by the item weight for that item. Do this for all the items in that area, and add up the results for each item.
2. Add up the item weights for all the items in a given area and multiply by the total number of personnel who marked the checklist.
3. Divide the number from step 1 by the number from step 2 and multiply by 100.

Development:

Rationale: This instrument was developed to provide information about factors relating to how patients feel about the nursing care provided them when they are in a hospital. This specific test was developed because the available alternative devices did not adequately meet the following eight criteria:

"1. measures satisfaction with nursing care from patients' and personnel's points of view,
2. provides data that can be quantified and handled statistically,
3. provides a sensitive and reliable measure of satisfaction,
4. reports what happened in a way that can be validated,
5. stimulates frank responses,
6. does not rely too heavily on memory of respondent,
7. provides information about specific components of patient care that can form the basis for constructive action,
8. can be administered quickly and without difficulty to a very large group of respondents" (Abdellah and Levine, 1957a).

Source of Items: The items were based upon a review of the literature; hospital observations made by a team which consisted of a psychologist, a nurse, and a statistician; lists compiled by health care personnel and hospitalized patients; and the professional experience of the authors.

Procedure for Development: There were several phases in the development of this instrument. During the first phase, a team made up of a psychologist, a nurse, and a statistician visited personnel and patients in three hospitals that volunteered to participate in this effort. During this phase, lists of specific occurrences of nursing care that could be observed were developed. Instructions to patients were to "list events of care you have received that were either satisfactory or unsatisfactory" (Abdellah and Levine, 1957a). Personnel were asked to list events of "patient care that should have been provided and was not, as well as instances in which patient care might have been improved" (Abdellah and Levine, 1957a).

The sample from each of the three hospitals was made up of 100 patients and all nursing and medical personnel in those hospitals. Sixty of the patients were asked to provide this information four times a day for up to 7 days. The remaining 40 patients were asked to do the above and were also interviewed by the team, either individually or in groups, in order to elicit information about other events and get more details about those already reported.

In the second phase of the development effort, 100 events were selected from those compiled during the first phase. These events, which had a higher frequency of occurrence than those not selected, were then placed on a list, and a 4-point response scale was provided for personnel responses. Personnel were asked to indicate the time period during which an event had occurred: before breakfast, breakfast to lunch, lunch to dinner, or after dinner. These checklists were given to all personnel in the same three hospitals as before. In addition, some personnel were asked to indicate how important each event was in relationship to patient satisfaction with the health care received. A

5-point response scale, ranging from "not important" to "very important," was used to gather this information.

In the third phase of the development effort, 50 events were selected from the 100 used in phase two. These events were selected either or both in terms of their having a higher frequency of occurrence or as having been rated as having more importance to patients. All nonnursing related events were also deleted from this set of statements. These statements were given to a new sample of personnel at a research hospital, and some of these personnel were interviewed to remove any remaining ambiguity from words or phrases in the checklist. Each item was also checked against Payne's list of words (Payne, 1951). During this phase, the response scale was also modified to the following three categories: "this happened today," "this happened some other day," and "this did not happen."

In the fourth phase of this effort, the final version of the Checklist for Personnel was given to 57 personnel in two hospitals not previously involved in this effort. These personnel were also asked to Q–sort the 50 statements so that 3 were most and 3 were least important, 12 were next most and next least important, and the remaining 20 were in the middle. A weight of 5, 4, 3, 2, and 1 was then assigned to each of the 50 statements, based on the average sorting of these events by the personnel.

In the final phase of this effort, the Checklist for Personnel was given to all personnel in a sample of 60 hospitals located in Illinois, Indiana, Michigan, New Jersey, New York, Ohio, and Wisconsin.

Reliability and Validity: No information is provided about the test-retest or split-half type reliability characteristics of this instrument.

No statistical information is provided about the validity characteristics of this test. However, attempts were made to confirm the accuracy of personnel responses by determining if the reported events actually occurred. The authors report a high degree of confirmation of the reported events (Abdellah and Levine, 1957a). In addition, the total scores generated from the test were examined to see if they agreed with patient feelings of overall satisfaction with the hospital in which they received health care. Those hospitals in which the interview indicated the least satisfaction with the health care received were also those that had a greater number of events checked on the instrument (Abdellah and Levine, 1957a). The authors also indicate that "The hospital that had the most favorable scores on the checklist was providing the smallest number of total nursing hours per patient day . . . [but] . . . that the professional nursing hours in this hospital were much higher than in the other two hospitals participating in the study" (Abdellah and Levine, 1957a).

Use in Research: Since its development, this instrument itself, or adaptations of it, have been widely used to assess nursing care from the perspective of patients and from the perspective of health care personnel.

Comments: This instrument appears to be easy to administer and score. Preliminary results suggest that the scores are likely to be congruent with similar information gathered from other sources and are, therefore, likely to be valid.

However, it would be desirable to gather information on the inter-item characteristics of the test. These results could then be used to confirm the placement of the items within subgroups and to increase the accuracy of the information produced from them. Also, because nursing practice has changed since 1957 when this instrument was developed, some items may no longer be relevant or significant events related to the nurse-patient relationship.

It would also be useful to gather data that could be used to help differentiate between items or groups of items that warrant remedial efforts versus items where the cost benefit of remedial efforts would not be sufficiently high.

Finally, since the weights derived from a Q–sort procedure typically reflect only the opinions of a majority of the persons in a sample, it would be useful to devise a scoring procedure that simply reflects the presence or absence of a certain number of checks within a subgroup of items. This pattern could then be examined to see if enough checks were present, across personnel, to warrant the development of remedial procedures.

References:

Abdellah, Faye G., and Levine, Eugene. Developing a measure of patient and personnel satisfaction with nursing care. *Nursing Research*, 1957a, *5*, 100–108.

______. *Patients and personnel speak.* Washington, D.C.: U.S. Public Health Service, Publication No. 527, 1957b. Revised 1964.

Payne, S. E. *The art of asking questions.* Princeton, N.J.: Princeton University Press, 1951.

Source of Information:
Patients and Personnel Speak, PHS Pub. No. 527 (Rev. 1964).

Available from:
National Technical Information Service
U.S. Dept. of Commerce
Springfield, Va. 22161
Order Number: HRP 0011424

Abdellah, Faye G., and Levine, Eugene

CHECKLIST FOR PERSONNEL

HOSPITAL NAME AND ADDRESS

TO OUR PERSONNEL—PLEASE CHECK TITLE OF YOUR POSITION:

☐ Hospital Administration
☐ Doctor
☐ Nursing Administration
☐ Supervisor
☐ Instructor
☐ Head Nurse
☐ Professional Staff Nurse
☐ Professional Nursing Student
☐ Practical Nurse or Practical Nursing Student
☐ Nursing Aide
☐ Orderly
☐ Other *(Specify)*

Today this hospital is making a study to find out how to give better nursing care to our patients.

On the following pages we have listed things which may have happened to one or more patients during the last 7 days. We are asking all personnel to *help the hospital* and *help the nursing staff* by checking these items.

1. Read each item carefully.
2. If something *did happen* today, put a check in the box which says, "This happened today." If it did *not* happen today, but *did happen* some other time during the last 7 days, put a check in the box which says, "This happened some other time during the last 7 days." (You may have to check both boxes in some cases.) If it *did not happen* at all in the last 7 days, then check the box which says, "This did *not* happen."
3. Do not sign your name.
4. Put your completed form in the envelope and seal it.
5. If there is something you want to say which is not included, please write it on the last page.

Please be frank. Your frank answers added to those of all other personnel will help the hospital get more help for our nursing staff.

	PLACE CHECK MARKS IN APPROPRIATE BOXES FOR ALL STATEMENTS	THIS HAPPENED —		DID NOT HAPPEN DURING LAST 7 DAYS
		TODAY	SOME OTHER TIME DURING LAST 7 DAYS	
1	Bed not made comfortable for a patient.			
2	Patient not properly prepared for special treatments.			
3	Post-op or critical patient left unattended for a long time.			
4	Student nurse or aide assigned duties beyond capabilities.			
5	Patient had to wait too long to have light answered.			
6	Personnel talked too loudly—disturbed patients.			
7	Patient did not get fresh drinking water.			
8	Patient did not receive needed medication.			
9	Equipment for patient not working correctly.			
10	Patient with communicable disease not properly isolated.			
11	Cold food served to patient.			
12	Patient not positioned correctly in bed.			
13	Patient left without signal cord within reach.			
14	Patient's room too chilly or too warm.			
15	Intake and output sheets were not completed.			
16	Soiled bed not changed promptly.			
17	Patient not given needed help with tray, urinal, etc.			
18	Patient not given a. m. or p. m. care.			
19	Nurse was unfriendly to patient.			
20	Patient's fluid intake and output were inadequate.			
21	Nurse given too much work to do.			
22	Insufficient information given about the patient's condition.			
23	Patient had to wait too long for treatment or surgery.			
24	Visitors interfered with treatments or medications.			
25	Could not find medication or equipment needed.			

PLACE CHECK MARKS IN APPROPRIATE BOXES FOR ALL STATEMENTS	THIS HAPPENED—		DID NOT HAPPEN DURING LAST 7 DAYS
	TODAY	SOME OTHER TIME DURING LAST 7 DAYS	
26 Patient's room too cluttered—interfered with treatment.			
27 Patient not informed about treatment or medication.			
28 Patient did not get help to bathroom when needed.			
29 Immediate supervisor ignored report of patient's difficulties.			
30 Aide had too much cleaning to do.			
31 Patient did not get medication on time.			
32 Patient had to wait too long for bath.			
33 Nurse was assigned too much clerical or desk work.			
34 Patient got out of bed against orders.			
35 Dressing not changed at proper time.			
36 Patient did not receive adequate mouth care.			
37 Patient went too long without urinating or a bowel movement.			
38 Patient not given needed treatment.			
39 Patient did not have needed drinking glass or straw.			
40 Side rail(s) left down on bed of patient who needed it up.			
41 Patient did not receive food on time.			
42 Patient given cold bedpan.			
43 Patient making noise disturbed other patients.			
44 Bedpan not brought to patient promptly.			
45 Patient placed in wheelchair without sufficient support.			
46 Patient unable to reach drinking water.			
47 Patient complained about being awakened too early.			
48 Patient rolled up too long before trays arrived.			
49 Patient not screened during medication, treatment, or rounds.			
50 Patient did not get enough attention from nurse(s).			

Title: PATIENT SATISFACTION INTERVIEW FORM

Author: Collins, Verla

Variable: Patient satisfaction with nursing care as it can be inferred from perceptions of the hospital experience and patient understanding of personal illness is the variable.

Description:

Nature and Content: This is a 20-item, structured interview guide. It was designed to elicit patients' perceptions about a variety of situations they may have experienced during hospitalization and the patients' personal understanding of the illnesses which resulted in the hospitalization. Both questions and responses follow a variety of formats, e.g., open-ended, multiple-choice, yes–no.

Administration and Scoring: The instrument was designed to be administered by trained interviewers. The author provided an orientation to the skills needed for those who participated in her data collection. However, no specific information regarding the content of this orientation was provided, nor was an acceptable rate of interrater reliability recommended. Approximately 30 minutes are required for each interview.

No information on scoring per se was provided; the instrument was coded for computerization.

Development:

Rationale: The instrument was not based on any specific theory.

Source of Items: Most of the questions contained in this instrument were contained in a much longer instrument called the Medical Center Hospital of Vermont (MCHV) Outcome Study Questionnaire (Houston, 1971).

Procedure for Development: No information was provided.

Reliability and Validity: No information on reliability was provided.

Data were submitted to chi-square analysis to determine whether or not there were significant differences in patient satisfaction with primary nursing as opposed to team nursing. There were no significant differences on any item other than item 20, i.e., those patients who had received care under primary nursing indicated a willingness to return to the hospital more often than did those who had been cared for by team nursing ($p=0.05$, $n=80$).

Use in Research: Collins's (1975) use of the instrument is described in her dissertation referenced below.

Comments: Any potential user should examine the items of the instrument carefully. To determine for himself(herself) how and/or if each is truly a measure of patient satisfaction and unbiased toward a particular staffing pattern. No scoring procedures were developed for the instrument per se; therefore, in its present form, it provides only descriptive data. However, with a great deal of psychometric attention, it could serve as a basis for developing a reliable, valid instrument.

References:

Collins, Verla. *The primary nursing role as a model for evaluating quality of patient care, patient satisfaction, and cost effectiveness in an acute care setting.* Unpublished doctoral dissertation, University of Utah, 1975.

Houston, C. S. Outcome of hospital care: Patient perception, April-June, 1970. University of Vermont College of Medicine, Department of Community Medicine, February 1971.

Availability:

Verla Collins, R.N., Ph.D.
Health Services Corporation of the Church of Jesus Christ of Latter-Day Saints
Salt Lake City, Utah 84111

Instrument Copyright: None.

Collins, Verla

PATIENT SATISFACTION INTERVIEW FORM

Good morning (afternoon, evening) Mr., Mrs., or Miss ____________________

I am ________________ and I am helping with a study to determine how the nursing care in the hospital is meeting patients' health needs. We are talking to patients discharged from the hospital during a two month period. Your help, by answering a few questions, would be very much appreciated. The information is confidential and will be used for statistical purposes. This study has been approved by the hospital and your doctor.

1. When first taken to your room was the attention and orientation you received

   excellent _____ good _____ fair _____ poor _____

2. After you were in your room, did someone explain hospital rules and procedures to you?

   Yes ____

   No _____

3. About how many nurses did actually examine or talk with you in the first two days after you came to the hospital... Was it

   (a) 1 to 3 _____

   (b) 4 to 6 _____

   (c) 7 to 9 _____

   (d) more than 10? _____

3a. Did you think that was

(a) too many _____

(b) not enough, or _____

(c) about right? _____

4. Did you know which registered nurse was in charge of your care?

always _____ usually _____ never _____

4a. Can you tell me the nurse's name?

5. Were your personal wishes and needs considered before procedures were carried out?

always _____ usually _____ never _____

6. If several nurses examine or talk with a patient rather than one, do you believe...

(a) the patient gets better care _____

(b) the patient gets worse care, or _____

(c) that it doesn't make any difference _____

(d) don't know or no opinion _____

7. Can you tell me why you feel this way?

8. Did you get enough attention from nurses while you were in the hospital?

(a) yes _____

(b) no _____

9. As a result of nursing care in the hospital, do you think your sickness or health problem was . . .

    (a) improved, ______

    (b) not improved, or ______

    (c) made worse? ______

10. When you are sick, do you like to know as much as possible what is wrong with you?

    (a) yes ______

    (b) no ______

    (c) other ______

11. While you were in the hospital were you able to find out all you wanted to know about

	Yes	No
(a) your health condition or problem?	____	____
(b) your treatment?	____	____
(c) your progress?	____	____

12. Who gave this information?

13. Were you able to get enough rest while you were in the hospital?

    (a) yes ______

    (b) no ______

14. Could you tell me what you thought of the nursing care you received while you were in the hospital . . .

    (a) excellent ______ good ______ fair ______ poor ______

    that it was . . .

(b) personal _____, or impersonal? _____

(c) gentle _____, or rough? _____

(d) prompt _____, or slow? _____

15. While you were in the hospital, is there any particular thing that happened with nurses which you could tell me about?

16. How did your family feel about the nurses and the care they gave?

excellent _____ good _____ fair _____ poor _____

17. When you left the hospital, did you feel that ...

(a) you had enough understanding of your sickness or health problems?
Yes _____
No _____

(b) you wanted to ask more questions about your health?
Yes _____
No _____

(c) or that you would be able to find out later what you wanted to know...
Yes _____
No _____

18. When you left the hospital, did you feel that those who took care of you understood your most important health problems?
Yes _____
No _____

19. When you left the hospital, did you feel that the nurses who took care of you gave you the best possible care?
Yes _____
No _____

20. Now if you had the same or another problem which needed hospital care would you . . .

(a) gladly go back to this hospital, _____

(b) never go back to this hospital, _____

(c) try to go somewhere else first, _____

(d) go to this hospital only if very ill, or _____

(e) refuse to go to any hospital? _____

Title: INPATIENT PSYCHIATRIC TREATMENT PROGRAM EVALUATION

Author: Freeman, Cynthia K.

Variable: The helpfulness of 15 treatment modalities utilized in an inpatient psychiatric treatment program as judged by patients discharged from the program is the variable being measured.

Description:

Nature and Content: This instrument consists of a list of 15 treatment modalities and aspects of hospitalization with possible response alternatives on a Likert-type scale which ranges from 1=very helpful to 5=unhelpful. Spaces for items of demographic data are included and instructions for completion of the questionnaire are printed on the top of the first page of this two-page instrument. There is space for respondent comments following each of the 15 items as well as space for the respondent to add additional items. Examples of items are: morning rounds, community meeting, interaction with other patients.

Administration and Scoring: No special provisions are necessary for completion of the instrument; any literate, time- place- person-oriented respondent can complete it.

Patients are provided with these instructions: "Below are listed a number of programs and aspects of being a patient . . . please consider each one at a time and decide how helpful they were to you during your hospitalization. Then circle the number that comes closest to your decision."

The instrument is scored by averaging responses for each item across subjects.

Development:

Rationale: One of the important aims of workers in the health care system is to improve the services that are offered to patients. A valuable way to evaluate and make improvements is to ask the patients themselves to share their opinions concerning programs they have participated in.

Source of Items: Items were selected to sample the major aspects of psychiatric hospitalization.

Procedure for Development: The questionnaire construction was based on ideas contained in Fryling and Fryling (1960) and Leonard (1973).

Reliability and Validity: This instrument was developed for a descriptive study. No attempt has been made to assess its reliability.

An attempt was made to assure content validity by the author's consultations with a psychiatric unit head nurse and a clinical specialist. These experts agreed that all major aspects of hospitalization were included in the instrument.

Use in Research: The instrument was developed and used by Freeman (1976) to investigate what aspects of the Clinical Psychiatry Unit of a University Hospital discharged patients perceived as having been most helpful. Discharged patients were contacted by mail and asked to complete a followup questionnaire.

Comments: The instrument provides a useful basic list of the major aspects of psychiatric hospitalization; however, its reliability must be demonstrated and its validity strengthened by additional psychometric attention. Also, a true Likert-type scale, the midpoint should represent a neutral position.

References:

Freeman, Cynthia. *A descriptive study of selected psychiatric patients' post-hospitalization evaluation of their in-patient psychiatric treatment program.* Presented at the Second Annual Research Symposium, University of Minnesota, School of Nursing, Minneapolis, 1976.

Fryling, Vera B., and Fryling, Gerald. Patients' attitudes toward sociotherapy. *The Psychiatric Quarterly Supplement*, 1960, *34*, 97–115.

Leonard, C. V. What helps most about hospitalization? *Comprehensive Psychiatry*, 1973, *14*, 365–369.

Source of Information:

Cynthia K. Freeman
Health Counseling Services
4829 Minnetonka Boulevard
St. Louis Park, Minn. 55416

Instrument Copyright: None.

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Freeman, Cynthia K.

INPATIENT PSYCHIATRIC TREATMENT PROGRAM EVALUATION

SEX:
Male ____
Female ____

AGE:
18-30 yrs. ____
31-45 yrs. ____
46-60 yrs. ____
over 60 yrs. ____

LENGTH OF HOSPITALIZATION:
10 days-1 mo. ____
1 mo.-2 mo. ____
2 mo.-3 mo. ____
over 3 months ____

INSTRUCTIONS: Below are listed a number of programs and aspects of being a patient. Please consider each one at a time and decide how helpful they were to you during your hospitalization. Then circle the number that comes closest to your decision. Space is provided after each item for you to make a brief comment concerning your reason for evaluating a certain item as helpful or unhelpful. Suggestions for ways to improve the different programs are also welcomed. Feel free to write on the back of the page if you need more room.

1. Morning Rounds 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

2. Group Therapy 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

3. Occupational Therapy 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

4. Community Meeting 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

5. Activity Meeting 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

6. Social Activities 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Comment:

7. Medications 1----------2----------3----------4----------5
very helpful — helpful — unhelpful

Doesn't apply to me ____

Comment:

8. Electroshock Treatments 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Doesn't apply to me ___

Comment:

9. Interaction with primary nurse 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

10. Interaction with Doctor 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

11. Interaction with other staff 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

12. Interaction with other patients 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

13. Being a community officer 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Doesn't apply to me ____

Comment:

14. Weekend Passes 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

15. Being in a new environment 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

16. Other ____________ 1---------2---------3---------4---------5
very helpful — helpful — unhelpful

Comment:

Title: FUTRELL INVENTORY OF PERCEPTIONS TOWARD HEALTH MAINTENANCE SERVICES FOR THE ELDERLY

Author: Futrell, May

Variables: A subject's perceptions of (1) the health needs of the elderly, (2) the degree to which those needs are being met, and (3) who should meet those needs, are the variables under study. Elderly is defined as any person over 65 years of age.

Description:

Nature and Content: This instrument consists of a list of 17 needs which the author identified as health care needs of the elderly. Each need is followed by three questions relevant to that need. The first, which has four categories for recording a response, elicits information about the degree of importance associated with each need specified on the instrument. The four response categories are: extremely important, important, little importance, and not important. The second set of responses elicits information about the degree to which the need is being met through existing services. The four response categories are: always met, usually met, seldom met, and never met. The final set of responses elicits information regarding which person or group of persons should have the primary responsibility for meeting the need specified. The six response categories are: physician, nurse, social worker, paraprofessional, patient, and patient's family.

Administration and Scoring: No special provisions are necessary for administering this instrument. Instructions are provided as part of the instrument. The author indicated that approximately 15 minutes are required for its completion.

No information on scoring was provided.

Development:

Rationale: No information regarding an underlying theoretical rationale was provided.

Source of Items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: No information was provided regarding the procedures used to develop the instrument.

Reliability and Validity: No reliability information was provided.

The instrument has face validity.

Use in Research: This instrument, along with Kogan's "Old People Scale," was used by Futrell (1975) for her dissertation research referenced below.

Comments: This instrument is still in the very early stages of development, and more information is needed before its potential usefulness can be fairly assessed. The subject addressed by the instrument is timely, and the instrument could be used with health care consumers as well as health care providers. However, an unnecessary bias is introduced by the explanation which follows each identified need, e.g., item 6 indicates that housing is important, but one of the response categories is "not important." Response categories for the variable "importance" could be strengthened, i.e., "extremely important" and "not important" are not conceptual opposites, and it would be preferable not to mix the terms "important" and "importance."

Though the author did not develop a scoring system per se for the instrument, one could be developed.

References:

Futrell, May. *Attitudes of physicians, nurses, and social workers toward the elderly and toward health maintenance service for the aged: Implications for health manpower policy.* Unpublished doctoral dissertation, Brandeis University, 1975.

Source of Information:

May Futrell, R.N., Ph.D.
College of Health Professions
University of Lowell—South Campus
Lowell, Mass. 01854

Instrument Copyright: May Futrell, Ph.D.

Futrell, May

FUTRELL INVENTORY OF PERCEPTIONS TOWARD HEALTH MAINTENANCE SERVICES FOR THE ELDERLY

On the following pages is a list of items that may be used to indicate what you think the health needs of the elderly (over 65) are and who you think should perform the tasks to meet these needs. This is not a test of your ability. It simply asks you to indicate what you think the health needs of the elderly are and who you think should perform the tasks to meet these needs.

DIRECTIONS

A. Read each item carefully.

B. Decide how important the health need is as described.

C. Check the appropriate box to indicate how important you regard it to be.

☐ Extremely important
☐ Important
☐ Little importance
☐ Not important

D. Check the appropriate box in column two to indicate the degree you think it is being met through existing services.

☐ Always met
☐ Usually met
☐ Seldom met
☐ Never met

E. Check the appropriate box in column three to indicate who you think should have primary responsibility for initiating intervention to meet these needs.

☐ Physician
☐ Nurse
☐ Social Worker
☐ Paraprofessional (Nonprofessional)
☐ Patient
☐ Family of patient

HEALTH CARE NEEDS OF THE ELDERLY	HOW IMPORTANT DO YOU REGARD THIS NEED TO BE?	DEGREE YOU FEEL NEED IS BEING MET THROUGH EXISTING SERVICES	WHO DO YOU THINK SHOULD HAVE THE PRIMARY RESPONSIBILITY FOR INITIATING INTERVENTION TO MEET THIS NEED?
1. PREVENTION OF ACCIDENTS The risk of accidents among the elderly is increased by such general physical changes as impaired vision and hearing, decreased sense of smell, and slower reflexes.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social Worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
2. PREVENTION OF EXPOSURE TO EXCESSES IN CLIMATE Extreme heat, cold, dampness and over-exposure to the sun are potential dangers to the elderly.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
3. MAINTENANCE OF GOOD GROOMING Good appearance can boost and maintain one's morale and self-image.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family

HEALTH CARE NEEDS OF THE ELDERLY	HOW IMPORTANT DO YOU REGARD THIS NEED TO BE?	DEGREE YOU FEEL NEED IS BEING MET THROUGH EXISTING SERVICES	WHO DO YOU THINK SHOULD HAVE THE PRIMARY RESPONSIBILITY FOR INITIATING INTERVENTION TO MEET THIS NEED?
4. NEED FOR MOBILITY The ability to ambulate and socialize is basically important to the older adults' independence and feelings of self-esteem, and has a direct bearing on physical health.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
5. CORRECT USE OF DRUGS AND MEDICINES The elderly need careful instructions in the use of drugs and medicines including the dangers of self diagnosis, self medication and cross medication.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
6. HOUSING - SAFE AND ADEQUATE Familiar surroundings are important to the elderly and maintenance of their own home is essential.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
7. NEED TO BELONG Every effort should be made to promote a meaningful relationship with their children and grandchildren.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family

HEALTH CARE NEEDS OF THE ELDERLY	HOW IMPORTANT DO YOU REGARD THIS NEED TO BE?	DEGREE YOU FEEL NEED IS BEING MET THROUGH EXISTING SERVICES	WHO DO YOU THINK SHOULD HAVE PRIMARY RESPONSIBILITY FOR INITIATING INTERVENTION TO MEET THIS NEED?
8. ADEQUATE FOOD NUTRITION If food habits have been basically sound, little change is necessary except an understanding that digestive processes slow down and meal size and spacing must be readjusted.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
9. NEED FOR ADEQUATE INSURANCE There is a need for supplemental and catastrophic illness coverage.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
10. NEED TO BE PRODUCTIVE In general people are happiest in our work oriented society if they are able to continue working as long as possible.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
11. NEED TO CREATE AND FEEL USEFUL Satisfying and constructive use of leisure time is a key factor in the morale and self-image of aging individuals.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
12. MAINTENANCE OF GOOD MENTAL HEALTH The pattern of "life review" and reminiscence is prevalent among the aging and should not be construed as abnormal.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family

HEALTH CARE NEEDS OF THE ELDERLY	HOW IMPORTANT DO YOU REGARD THIS NEED TO BE?	DEGREE YOU FEEL NEED IS BEING MET THROUGH EXISTING SERVICES	WHO DO YOU THINK SHOULD HAVE THE PRIMARY RESPONSIBILITY FOR INITIATING INTERVENTION TO MEET THIS NEED?
13. NEED FOR GOOD PERSONAL HABITS Eye hygiene, care of the feet, physical activity, sleep, care of teeth, and consideration of sexual needs.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
14. NEED FOR PROTECTIVE SERVICES The elderly need an advocate they can consult before signing documents and contracts.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
15. NEED FOR SKILLED CARE SERVICES For acute and long-term illness and assisting the client with the process of dying.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
16. NEED FOR INCOME MAINTENANCE SERVICES To maintain independence and ability to make choices concerning health service needed.	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family
17. NEED FOR PREVENTIVE SERVICES Routine physical and mental assessments with referrals to supporting services (e.g., hearing examinations).	☐ Extremely important ☐ Important ☐ Little importance ☐ Not important	☐ Always met ☐ Usually met ☐ Seldom met ☐ Never met	☐ Physician ☐ Nurse ☐ Social worker ☐ Paraprofessional ☐ Patient ☐ Patient's family

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Title: PEDIATRIC PARENTS AND STAFF SEMANTIC DIFFERENTIAL SCALES

Author: Gohsman, Barbara

Variable: Attitudes of parents of pediatric patients and pediatric staff members toward hospitalization is the variable under study. The author provided the following definitions:

Attitude—a position or bearing indicating feeling or mood—a generalized response to a particular situation.

Pediatric parent—parent of a hospitalized child.

Pediatric staff—registered nurses, licensed practical nurses, nurse aides, and volunteer grandmothers engaged in supervising or administering some aspect of care to pediatric patients."

Description:

Nature and Content: This is a set of self-administered semantic differential scales made up of 8 pairs of bipolar adjectives under each of 12 concept headings. The concepts are nurse, fear, time, child, pain, care, parents, doctor, nurse aide, crying, shot, and comfort. Each of the 8 pairs of adjectives are separated by seven equal-length intervals which indicate the respondents' degrees of association of the adjective with the concept. Directions precede the first set of scales.

Administration and Scoring: No special provisions are necessary for administration of the scales; however, it is imperative that the subject understand the directions for this particular type of instrument. The author estimated that approximately 5 to 15 minutes are required for completion.

For this instrument, good-bad, fair-unfair, important-unimportant, kind-cruel were designated "evaluative" adjectives; strong-weak, cooperative-uncooperative, simple-complex, powerful-powerless were designated "potency" adjectives.

A score of 1 is assigned to the highest space on the positive end of the continuum separating each pair of adjectives, and 7 is assigned to the space on the negative end of the continuum. The spaces between these two extremes are assigned values of 2, 3, 4, 5, and 6, as appropriate. A score for the evaluative adjectives and a score for the potency adjectives is computed for each subject for each concept. Analysis of the data depends upon the needs and purposes of the researcher. Scores can be analyzed for differences between concepts, between scales, between subjects, or any combination thereof (Kerlinger, 1964).

Development:

Rationale: The instrument is based upon the work of Osgood and his associates (1957, 1969).

Source of Items: A list of concepts related to a pediatric ward and hospitalization was developed by the author and one of her professional peers. The adjectives were chosen from Osgood's (1957) list of evaluative and potency bipolar adjectives.

Procedure for Development: The list of concepts, identified above, was reviewed by representative members of the faculty of the Eastern Montana College's departments of education and special education. Through faculty consultation, the author narrowed the list to the 12 concepts addressed by the instrument.

Reliability and Validity: No information on reliability or validity is available.

Use in Research: Gohsman (1975) developed and used the instrument in her master's thesis referenced below.

Comments: This methodology is based upon Osgood's theory of measurement and anyone contemplating using it should consult Osgood et al. (1957) and Snider and Osgood (1969). A particular method of scoring and statistical analysis is required for a valid application of the method. However, this methodology does offer a useful alternative approach to the usual information-gathering techniques.

References:

Gohsman, Barbara. *Differences in attitude toward hospitalization between pediatric staff and parents of hospitalized children.* Unpublished master's thesis, Eastern Montana College, 1975.

Kerlinger, Fred. *Foundations of behavioral research*, 2nd edition. New York: Holt, Rhinehart, and Winston, 1964.

Osgood, Charles E., Suci, G., and Tannenbaum, P. *The measurement of meaning.* Urbana: University of Chicago Press, 1957.

Snider, James G., and Osgood, Charles E. *Semantic differential techniques.* Chicago: Aldine Publishing Co., 1969.

Source of Information:

Barbara Gohsman, R.N., M.N.
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Montana State University
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Billings, Mont. 59102

Instrument Copyright: None.

Gohsman, Barbara

PEDIATRIC PARENTS AND STAFF SEMANTIC DIFFERENTIAL SCALES

DIRECTIONS

The purpose of this study is to measure the "meanings" of certain concepts to various people by having you judge them against a series of descriptive scales. In completing this form, please make your judgements on the basis on what these concepts mean to you. Choose the first answer that comes to your mind. Rate the concept on each of these scales by placing a check mark (✓) in the space closest to that end of the scale which expresses its meaning to you.

FOR EXAMPLES:

AUTOMOBILE

safe	✓							dangerous
	very closely related	quite closely related	slightly related	neutral	slightly related	quite closely related	very closely related	

If you feel that "automobile" is very closely related to "safe" you should check the space closest to "safe" (as in the example above). If you consider the concept to be very closely related to "dangerous" you should place your check mark at the opposite end of the scale.

Each space has its rating as described under it. Please put your ✓ mark in the middle of the space (: ✓ :) along the line where your judgement lies. Each line represents a scale. Put only one mark on each scale.

NURSE

good								bad
fair								unfair
unimportant								important
cruel								kind
weak								strong
cooperative								uncooperative
complex								simple
powerful								powerless

FEAR

bad								good
fair								unfair
important								unimportant
cruel								kind
weak								strong
uncooperative								cooperative
simple								complex
powerless								powerful

TIME

bad								good
fair								unfair
unimportant								important
cruel								kind
strong								weak
cooperative								uncooperative
simple								complex
powerless								powerful

CHILD

good								bad
fair								unfair
unimportant								important
cruel								kind
weak								strong
cooperative								uncooperative
complex								simple
powerful								powerless

PAIN

bad								good
fair								unfair
unimportant								important
cruel								kind
strong								weak
cooperative								uncooperative
simple								complex
powerless								powerful

CARE

bad								good
fair								unfair
important								unimportant
cruel								kind
weak								strong
uncooperative								cooperative
simple								complex
powerless								powerful

PARENTS

good								bad
fair								unfair
unimportant								important
cruel								kind
weak								strong
cooperative								uncooperative
complex								simple
powerful								powerless

DOCTOR

bad :______:______:______:______:______:______:______: good
fair :______:______:______:______:______:______:______: unfair
important :______:______:______:______:______:______:______: unimportant
cruel :______:______:______:______:______:______:______: kind
weak :______:______:______:______:______:______:______: strong
uncooperative :______:______:______:______:______:______:______: cooperative
simple :______:______:______:______:______:______:______: complex
powerless :______:______:______:______:______:______:______: powerful

NURSE AIDE

bad :______:______:______:______:______:______:______: good
fair :______:______:______:______:______:______:______: unfair
unimportant :______:______:______:______:______:______:______: important
cruel :______:______:______:______:______:______:______: kind
strong :______:______:______:______:______:______:______: weak
cooperative :______:______:______:______:______:______:______: uncooperative
simple :______:______:______:______:______:______:______: complex
powerless :______:______:______:______:______:______:______: powerful

CRYING

good :______:______:______:______:______:______:______: bad
fair :______:______:______:______:______:______:______: unfair
unimportant :______:______:______:______:______:______:______: important
cruel :______:______:______:______:______:______:______: kind
weak :______:______:______:______:______:______:______: strong
cooperative :______:______:______:______:______:______:______: uncooperative
simple :______:______:______:______:______:______:______: complex
powerless :______:______:______:______:______:______:______: powerful

SHOT

bad :____:____:____:____:____:____:____: good

fair :____:____:____:____:____:____:____: unfair

important :____:____:____:____:____:____:____: unimportant

cruel :____:____:____:____:____:____:____: kind

weak :____:____:____:____:____:____:____: strong

cooperative :____:____:____:____:____:____:____: uncooperative

simple :____:____:____:____:____:____:____: complex

powerful :____:____:____:____:____:____:____: powerless

COMFORT

good :____:____:____:____:____:____:____: bad

fair :____:____:____:____:____:____:____: unfair

unimportant :____:____:____:____:____:____:____: important

cruel :____:____:____:____:____:____:____: kind

weak :____:____:____:____:____:____:____: strong

uncooperative :____:____:____:____:____:____:____: cooperative

simple :____:____:____:____:____:____:____: complex

powerless :____:____:____:____:____:____:____: powerful

Title: COMMUNITY MENTAL HEALTH CRITICAL ISSUES TEST (CMIT)

Author: Gottesfeld, Harry

Variable: The variable is an individual's or a group's attitudes toward six major issues in the community mental health field. The issues are:

1. *Community context:* This issue involves work directly in the community, not from an institutional base; the community determines the kinds of service it needs; staff operates as an open, democratic community; social terminology is used.

2. *Radicalism:* Rapid, drastic changes in community mental health are needed; mental health centers should be controlled by local citizens; mental health programs should aim at reaching masses; optimism prevails about the direction of the community mental health movement.

3. *Traditional psychotherapy:* Services are professionalized; emphasis is on individual psychotherapy and long-term treatment with a psychoanalytic theoretical base; leadership is psychiatric; community mental health should try to model itself after private practice.

4. *Prevention:* Approaches aimed at reducing the incidence of mental problems and breakdowns; preventing incipient problems from becoming worse and stabilizing people who have had an emotional disorder, received treatment and are back in the community; approaches emphasize crisis intervention, identification of incipient problems, and consultations with social agencies.

5. *Extending the definition of mental health:* Extending the definition of mental health from diagnosis and treatment of traditional diagnostic categories such as neurosis and psychosis to new areas for study and change such as racial discrimination, violence, and educational achievement.

6. *Role diffusion:* Professionals perform varied functions for which they did not receive training; important mental health activities are carried out by people not in the mental health field; the role of "patient" or "person in need of help" is not restricted (Gottesfeld, 1974).

Description:

Nature and Content: This is a 72-item attitude scale. It contains such items as, "The orthodox psychoanalyst is needed in community mental health work," and "All important administrative decisions should be voted on by both staff and patients." Each item is rated on a 6-point, Likert-type scale from "strongly agree" to "strongly disagree." Demographic data of the respondent are also recorded.

Administration and Scoring: The instrument is self-administered and can be completed by anyone knowledgeable about the mental health field. It can be administered individually or in groups. There are no time restrictions for completion of the test form and respondents are urged to complete all items in the test.

The CMIT may be hand scored or electronically scored. Hand-scoring instructions are provided in the test manual. Information relative to electronic data processing and the application of statistical tests are available from the author.

> The interpretation of the meaning of the scores requires more than a mechanical comparison with the table of norms. This should be done by someone who has knowledge about the utilization of attitude scales, the nature of the sample group and current issues in the locality of the institution (Gottesfeld, 1974).

Development:

Rationale: Gottesfeld states that the underlying theoretical rationale is described in his book *The Critical Issues in Community Mental Health* (1973).

Source of Items: The items were derived from the professional literature, and the issues resulted from a factor analysis of the opinions of 830 mental health workers.

Procedure for Development: The original 100-item questionnaire was judged by the author to be overly lengthy and tiring to respondents. Also, analysis showed that a relatively large number of items loaded on one issue or factor (community context). The questionnaire was shortened by choosing 12 items for each issue (usually the items with the highest factor loadings) to make a 72-item scale. Instructions were revised and a change was made on some items to minimize response set.

Reliability and Validity: The revised instrument was tested for reliability with 200 health workers in various mental health facilities in the New York metropolitan area.

To estimate the internal consistency of each issue scale, coefficient Alpha was determined. These were as follows: (1) community context 0.93, (2) radicalism 0.95, (3) traditional psychotherapy 0.92, (4) prevention 0.93, (5) extending the definition of mental health 0.86, (6) role diffusion 0.89 (Gottesfeld, 1974).

Content validity was established by a principal component factor analysis of the critical issues from the literature in community mental health. In terms of criterion-related validity, biserial correlations for respondents with "moderate" and "strong" views (as measured by the CMIT and their "interests" scores as indicated by books they had read and the meetings they had attended during the past year) were significant at the 0.01 level of confidence (Gottesfeld, 1974).

Normative data and a detailed statistical analysis is presented in Gottesfeld (1974).

Use in Research: No information was provided.

Comments: The test is still in an early stage of development, available norms are limited to the New York area, and all interpretations of data should be made on a tentative basis (Gottesfeld, 1974). Anyone contemplating using a Likert-type response format should examine this instrument; its response format is clear and simple, and it should be subject to a minimum of respondent errors.

References:

Gottesfeld, H. *The critical issues of community mental health.* New York: Behavioral Publications, 1973.

______. *The Gottesfeld community mental health critical issues test manual.* New York: Behavioral Publications, 1974.

Source of Information:

Harry Gottesfeld, Ph.D.
11 Riverside Drive
New York, N.Y. 10023

Instrument Copyright:

Human Sciences Press
72 Fifth Avenue
New York, N.Y. 10011

The
Gottesfeld
Community Mental Health
Critical Issues Test

Harry Gottesfeld, Ph.D.

The following statements relate directly or indirectly to community mental health. Please read each statement and then indicate to what extent you agree or disagree with it. You should do this by circling next to each statement the one of the six symbols which best represents your own feelings about this statement.

Make sure that you circle a symbol for each statement. Leave none of the items blank and make only one circle for each item. Like everyone else, you will feel that you do not know how to judge some of these statements. When this occurs, please make the best estimate you can. You should not spend more than a few seconds on each item. If it seems difficult to make up your mind, make the best judgment you can and go on to the next item.

Please do *not* write your name.

Circle AAA, if you strongly agree
Circle AA, if you moderately agree (generally agree with some reservations)
Circle A, if you slightly agree (more arguments for than against)
Circle D, if you slightly disagree (more arguments against than for)
Circle DD, if you moderately disagree (generally disagree with some reservations)
Circle DDD, if you strongly disagree

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	AGREE			DISAGREE			OFFICE USE ONLY					
	Strongly	Moderately	Slightly	Slightly	Moderately	Strongly	*A*	*B*	*C*	*D*	*E*	*F*
1. The community mental health movement is moving too rapidly with insufficient planning.	AAA	AA	A	D	DD	DDD		=				
2. Even a small intervention during a personal crisis by a mental health professional will have a significant effect.	AAA	AA	A	D	DD	DDD				•		
3. Successful treatment of mental illness requires treatment of society as a whole.	AAA	AA	A	D	DD	DDD	•					
4. Psychiatric patients should be employed for such tasks as making home visits to other psychiatric patients.	AAA	AA	A	D	DD	DDD						•
5. Self-help groups, like Alcoholics Anonymous, are more effective than the efforts of professionals.	AAA	AA	A	D	DD	DDD					=	
6. The same clinical team should be responsible for each patient's initial evaluation, treatment and follow-up.	AAA	AA	A	D	DD	DDD				•		
7. Emergency services should not be manned by beginning psychiatric students.	AAA	AA	A	D	DD	DDD						=
8. When a community mental health center and a welfare agency collaborate, staff is utilized most effectively if the center's mental health personnel serve as consultants to the welfare agency's workers.	AAA	AA	A	D	DD	DDD				•		
9. Police are potentially one of the most suitable groups for training in family crisis intervention.	AAA	AA	A	D	DD	DDD						•
10. Most schizophrenic patients need hospitalization and should not be kept with their families.	AAA	AA	A	D	DD	DDD			•			
11. Instead of waiting until the student comes to someone with his problems, students in distress should be identified through such means as reports of faculty and dormitory counselors.	AAA	AA	A	D	DD	DDD				•		
12. There is little that psychiatry can do about such problems as criminal behavior.	AAA	AA	A	D	DD	DDD					=	
13. Volunteers should not be encouraged to establish personal relationships with psychiatric patients.	AAA	AA	A	D	DD	DDD						=
14. The terms "mental illness" and "treatment" should be replaced by "psychosocial disabilities," and "re-education."	AAA	AA	A	D	DD	DDD	•					
15. Virtually all close relatives of patients should be in some kind of group therapy program.	AAA	AA	A	D	DD	DDD				•		
16. The orthodox psychoanalyst is needed in community mental health work.	AAA	AA	A	D	DD	DDD			•			
17. Low-income persons are not sophisticated enough to participate in policy making in health agencies.	AAA	AA	A	D	DD	DDD		=				
18. Mental health professionals should expend their time primarily on the expert treatment of individuals who seek their help.	AAA	AA	A	D	DD	DDD			•			
19. Planned recreational activities provide an important release from tensions and anxiety producing situations.	AAA	AA	A	D	DD	DDD				•		

	AGREE			DISAGREE			OFFICE USE ONLY					
	Strongly	Moderately	Slightly	Slightly	Moderately	Strongly	A	B	C	D	E	F
20. Patients should participate with staff in developing new ideas and ways of doing things.	AAA	AA	A	D	DD	DDD						•
21. To engage in primary prevention and basic research before offering treatment to those who are already ill is a mockery of community service.	AAA	AA	A	D	DD	DDD				=		
22. The day, evening and weekend hospital will replace the mental hospital.	AAA	AA	A	D	DD	DDD	•					
23. In order to protect society, court orders for psychotherapy should be made frequently.	AAA	AA	A	D	DD	DDD			•			
24. Community mental health can do little to change racial discrimination, inadequate housing and inferior educational opportunities.	AAA	AA	A	D	DD	DDD					=	
25. An important role for the public health nurse is to teach the patient and his family ways of handling their emotional problems.	AAA	AA	A	D	DD	DDD						•
26. Patients who apply for psychiatric help and then decide not to come have a right to privacy and should not be followed up as to their reasons for not coming.	AAA	AA	A	D	DD	DDD				=		
27. Mass treatment or mass prevention methods in psychiatry will only lead to disappointments.	AAA	AA	A	D	DD	DDD		=				
28. Professionals and non-professionals should not be trained together.	AAA	AA	A	D	DD	DDD	=					
29. The private practice model in which the patient is free to choose his own therapist, responsibility is concentrated in one therapist and the therapist is an agent of the patient, should be followed as much as possible in a community mental health center.	AAA	AA	A	D	DD	DDD			•			
30. Preventative psychiatry should concentrate on strengthening the family unit.	AAA	AA	A	D	DD	DDD				•		
31. Community mental health resources can provide little help to the mentally retarded.	AAA	AA	A	D	DD	DDD					=	
32. The community mental health center should have the responsibility of coordinating all aftercare efforts even though this involves agencies with conflicting philosophies and procedures.	AAA	AA	A	D	DD	DDD				•		
33. A community mental health center is best directed by a psychiatrist.	AAA	AA	A	D	DD	DDD			•			
34. If local citizens are involved in policy-making and decisions, mental health professionals are not likely to be attracted to community mental health.	AAA	AA	A	D	DD	DDD		=				
35. The establishment of community mental health centers will result in ordinary problems of living being interpreted as psychiatric problems.	AAA	AA	A	D	DD	DDD		=				
36. The most effective way to treat the emotionally disturbed child is by long term psychotherapy of the child and his parents.	AAA	AA	A	D	DD	DDD			•			
37. We have little knowledge of the kinds of human relationships which tend to promote mental health within the community.	AAA	AA	A	D	DD	DDD					=	
38. A community mental health center should not have facilities for long term care of the aged.	AAA	AA	A	D	DD	DDD						=

	AGREE			DISAGREE			OFFICE USE ONLY					
	Strongly	Moderately	Slightly	Slightly	Moderately	Strongly	A	B	C	D	E	F
39. The community mental health center should not be involved in such tasks as organizing block associations, tenant councils and welfare client organizations.	AAA	AA	A	D	DD	DDD	=					
40. Home psychiatric evaluations would prove of more value than evaluations at an office or hospital.	AAA	AA	A	D	DD	DDD	•					
41. Information revealed by a patient to a psychologist that could endanger the community should be given to the proper authorities.	AAA	AA	A	D	DD	DDD				•		
42. Psychiatric theory has little to contribute to the understanding of complex social organizations.	AAA	AA	A	D	DD	DDD					=	
43. A walk in (emergency) psychiatric clinic should serve patients who do not present psychiatric emergencies.	AAA	AA	A	D	DD	DDD						•
44. Community organization efforts are less important than mental health services.	AAA	AA	A	D	DD	DDD	=					
45. A great risk of the community mental health center is that patients will be sent home prematurely.	AAA	AA	A	D	DD	DDD		=				
46. It is necessary for a mental health consultant to a social agency to have a detailed knowledge of the agency's policies and procedures.	AAA	AA	A	D	DD	DDD					•	
47. Public service agencies are fragmentized, complex and bureaucratic and are frustrating to the people they serve.	AAA	AA	A	D	DD	DDD			=			
48. A sound educational program will have a greater impact on the mental health of children than extensive mental health services in the schools.	AAA	AA	A	D	DD	DDD					=	
49. The community mental health movement will not result in a watering down of clinical training.	AAA	AA	A	D	DD	DDD		•				
50. Important decisions about a patient should be made by agreement of the clinical team rather than by the professional in charge.	AAA	AA	A	D	DD	DDD	•					
51. The ability to involve leaders of the community with the community mental health center requires training and knowledge that a psychiatrist ordinarily does not possess.	AAA	AA	A	D	DD	DDD			=			
52. An important role for the school's consulting psychologist is to mediate disputes between school administrators and parents.	AAA	AA	A	D	DD	DDD						•
53. Efforts to involve local citizens in mental health planning and decision making will prove to be undemocratic in that few citizens will participate and those that do will do so for personal ambition or to advance special interests.	AAA	AA	A	D	DD	DDD		=				
54. It is important that a community mental health center have its own rehabilitation services even if there are other local agencies with excellent rehabilitation services.	AAA	AA	A	D	DD	DDD			•			
55. Mental problems of the lower socioeconomic groups are so intertwined with real social problems that they rarely can be solved by the skills of the psychiatrist.	AAA	AA	A	D	DD	DDD	•					

	AGREE			DISAGREE			OFFICE USE ONLY					
	Strongly	Moderately	Slightly	Slightly	Moderately	Strongly	A	B	C	D	E	F
56. Community agencies and human-service programs function not primarily to help people in difficulty but to protect the community against perceived trouble makers.	AAA	AA	A	D	DD	DDD					=	
57. An important aspect of the psychiatric consultant's work with the staff of a social agency is to encourage ventilation of personal feelings about the agency.	AAA	AA	A	D	DD	DDD						•
58. In community mental health, by shifting the emphasis from the institution to the community we are really only shifting the care of the mentally ill from trained staff to poorly trained staff, untrained staff or no staff at all.	AAA	AA	A	D	DD	DDD		=				
59. The community mental health center should try to change policies of the schools, police and welfare that are contrary to mental health.	AAA	AA	A	D	DD	DDD					•	
60. All important administrative decisions should be voted on by both staff and patients.	AAA	AA	A	D	DD	DDD	•					
61. Militant social action groups should be permitted to participate in the planning of community mental health services.	AAA	AA	A	D	DD	DDD		•				
62. An important role for the social worker is to teach people how to deal with social agencies.	AAA	AA	A	D	DD	DDD						•
63. When a psychiatric nurse recognizes that a child is being psychologically damaged she should be able to compel the parents to begin a treatment program.	AAA	AA	A	D	DD	DDD			•			
64. Community mental health programs are committed to political positions rather than health concerns.	AAA	AA	A	D	DD	DDD		=				
65. Mental hospitals should be distantly located to remove the patient from pathological neighborhood and family influences.	AAA	AA	A	D	DD	DDD					=	
66. All staff of a community mental health center should be psychoanalytically oriented.	AAA	AA	A	D	DD	DDD			•			
67. Before a clergyman performs a marriage that he believes has a high risk of failure, he should refer the couple to a mental health center.	AAA	AA	A	D	DD	DDD				•		
68. The community mental health center should focus its efforts on general areas of community concern, such as racial tension.	AAA	AA	A	D	DD	DDD	•					
69. Direct social services by the social worker are of little importance in a community mental health center.	AAA	AA	A	D	DD	DDD					=	
70. Local political and community leaders should be on the governing board of a community mental health center.	AAA	AA	A	D	DD	DDD						•
71. Small psychiatric units in general hospitals are not any more helpful to psychiatric patients than large mental hospitals.	AAA	AA	A	D	DD	DDD	•					
72. Enthusiasm for the new comprehensive community mental health centers rests more on a base of hopefulness than on any real evidence.	AAA	AA	A	D	DD	DDD		=				

OFFICE USE ONLY

	A	B	C	D	E	F
T						
M						

Please answer the following questions by check marks (✓):

			Office Use Only
1. What is your sex?			
	Female	______	6-1
	Male	______	6-2
2. How old are you at present?			
	Under 30	______	7-1
	30-40	______	7-2
	40-50	______	7-3
	Over 50	______	7-4
3. What is your ethnic background?			
	Black (not Spanish-American)	______	8-1
	White (not Spanish-American)	______	8-2
	Spanish-American	______	8-3
	Other	______	8-4
4. What is your occupation?			
	Nurse	______	9-1
	Paraprofessional	______	9-2
	Psychiatrist	______	9-3
	Psychologist	______	9-4
	Social Worker	______	9-5
	Other	______	9-6
5. What type of work do you primarily do?			
	Direct Services	______	10-1
	Supervision	______	10-2
	Administration	______	10-3
	Teaching	______	10-4
	Research	______	10-5
	Other	______	10-6
6. Is your work primarily in a community mental health center?			
	Yes	______	11-1
	No	______	11-2
7. For what type of organization do you work?			
	Federal	______	12-1
	State	______	12-2
	City or County	______	12-3
	Non profit, Private	______	12-4
	Profit, Private	______	12-5
	None of the Above	______	12-6

Title: POSTOPERATIVE INTERVIEW GUIDE

Author: Hegyvary, Sue T.

Variables: This instrument was designed to elicit information on three variables—(1) patient's level of understanding of required role, (2) patient's postoperative perceptions of preoperative stress, and (3) organizational constraints.

Description:

Nature and Content: This interview guide consists of 21 questions that collect information about a variety of situations involving hospitalized patients. No definitions are provided for the variables; however, the variables are operationalized by subgroups of questions contained in the instrument. *Patient's level of understanding of required role* is made up of responses to four questions; *patient's postoperative perceptions of preoperative stress* is operationalized by responses to three questions; *organizational constraints* is made up of five questions.

Administration and Scoring: This instrument was designed to be administered by an interviewer. No information was provided regarding any special provisions necessary for administration or any suggested procedures for training the interviewers.

A 3-level numeric score is derived for each variable. The three levels are high, medium, and low. The meaning of these response categories depends on the variable being measured. For *patient's level of understanding of required role* (Part A, items 2, 3, 5, and 7), *high* is defined to mean "Identifies major factors in postoperative care, definitely breathing-coughing or blow bottles and ambulation, knew what he was expected to do. No surprises. Desired changes not related to understanding of expected behaviors." *Medium* is defined to mean "Understood many things about role, but some gaps in understanding." *Low* is defined to mean "Did not know what he was expected to do. Wanted more information. Cannot identify major factors to tell another patient."

For *patient's postoperative perceptions of preoperative stress* (Part B, items 1, 2, and 3), *high* is defined to mean "Uses high anxiety words in reporting feelings. Intensity strong." *Medium* is defined to mean "Reports moderate preoperative anxiety. Some anxiety words, but not highest intensity." *Low* is defined to mean "Reports low or no anxiety."

For *organizational constraints* (Part C, items 1, 2, 5, 6, and 7) *high* is defined to mean "Identifies factors that impeded recovery. Had stressful postoperative course." *Medium* is defined to mean "Recognizes some areas for improvement. Had discomforts, but no severe situations described." *Low* is defined to mean "Positive about care. No suggestions for improvement." (Hegyvary, 1974).

Development:

Rationale: The instrument was developed for use in examining the relationship between postoperative outcomes and the type of organizational setting characteristic of a hospital.

Source of Items: The items were based upon a review of the literature and the author's professional experience.

Procedure for Development: The instrument was administered to 91 females who had had abdominal hysterectomies in two southern hospitals. One hospital was affiliated with a religious institution. Both were nongovernmental, nonprofit, general acute care hospitals having from 400 to 500 beds. One hospital had a more complex organizational chart than the other and was also described as having less nursing administrative support. Patients were randomly assigned to two groups in each hospital. Patients in one group in each hospital were given preoperative instructions that included such things as preparation required before going to surgery and when and how they would return to a regular diet. The other group of patients in each hospital was not given this information.

Reliability and Validity: No information was provided regarding the test-retest, the generalized split-half, or the interobserver reliability characteristics of the variables measured by the instrument.

There is some evidence of discriminant validity in that Hegyvary's results indicated that the patients given the preoperative information in both hospitals had more positive scores on *patient's level of understanding of required role* than did their counterparts who did not receive this information. No other variables were significantly related to this variable across all patients, though there was a tendency for it to be associated with a lowered incidence of complications and fewer days of postoperative hospitalization in one hospital.

Use in Research: The development and use of the instrument are described in Hegyvary's (1974) doctoral dissertation and the subsequent articles (1975) referenced below.

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Comments: The author stated that in her study those parts of the interview designed to elicit information on preoperative stress and organizational constraints "showed little variance, were judged to be unreliable, and were deleted from the study."

Any potential user, therefore, needs to be aware of the implications of this information and prepared to make revisions in the instrument.

References:

Hegyvary, Sue T. *Organizational setting and patient care outcomes: An exploratory study.* Unpublished dissertation, Vanderbilt University, 1974.

Hegyvary, Sue T., and Chamings, Patricia A. The hospital setting and patient care outcomes (Part I). *Journal of Nursing Administration,* 1975, *5* (3), 29–32.

———. The hospital setting and patient care outcomes (Part II). *Journal of Nursing Administration,* 1975, *5* (4), 36–42.

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Hegyvary, Sue T.

POSTOPERATIVE INTERVIEW GUIDE

A.

1. Do you think patients should be expected to help take care of themselves while in the hospital?

2. If one of your friends were having this same operation, what things would you tell him (her) would happen to him (her)? (Probe: what treatments will be done and what will he (she) have to do for himself (herself))?

3. Before your operation, what things did you know you would have to do postoperatively?

4. How did you find out about these things? (Find out all major sources of information.)

5. Are there things that you think should have been explained to you, but were not?

6. While you have been here, have things happened as you expected they would?

7. If you had to go through this experience again, how would you want it to be different?

B.

1. Now think back to the day before your operation. Could you describe to me your thoughts and feelings then about having the operation?

2. Were there particular things that you were worried or concerned about then?

3. Would you say that your worries or concerns then were very strong, moderate, or slight?

4. When did you begin to feel less worried?

5. Before your operation do you think it is more important that the nurses give you specific information or that they simply let you know they are going to be there whenever you need them?

C.

1. Do you think your doctors and nurses have spent enough time with you while you have been here?
   If yes: Are there any additional things you think they should have done for you?
   If no: Do you have any idea why they did not spend more time with you?

2. Which kind of nursing worker would you say has taken care of you most: RN, LPN, or nursing aide?

3. What things have the registered nurses done for you?

4. Were any other patients helpful to you either before or after your operation?

5. While you have been in the hospital, has anything happened to you that has annoyed you or made you angry?
   If yes: Could you describe what happened?

6. Aside from doctors and nurses, do you think there is anything in general that happens in hospitals that makes patients feel uncomfortable or slows down their getting well?

7. Were your family or friends allowed to visit you freely enough while you've been here?

8. During your stay in the hospital, when was it most important to you that they be here?

Hegyvary, Sue T.

GUIDE FOR ANALYSIS OF POSTOPERATIVE INTERVIEW GUIDE

A: Patient's Level of Understanding of Required Role (Part A: #2, 3, 5, 7)[1]

Hi : Identifies major factors in postop. care, definitely breathing-coughing or blow bottles and ambulation. Knew what he was expected to do. No surprises. Desired changes not related to understanding of expected behaviors.

Med: Understood many things about role, but some gaps in understanding.

Lo : Did not know what he was expected to do. Wanted more information. Cannot identify major factors to tell another patient.

B: Prepoperative Stress (Refer to #6 on Preoperative Stress Scale)
Part B: #1, 2, 3)

Hi : Uses high anxiety words in reporting feelings. Intensity strong.

Med: Reports moderate preoperative anxiety. Some anxiety words, but not highest intensity.

Lo : Reports low or no anxiety.

C: Organizational Constraints (Part C: #1, 2, 5, 6, 7)

Hi : Identifies factors that impeded recovery. Had stressful post-operative course.

Med: Recognizes some areas for improvement. Had discomforts, but no severe situations described.

Lo : Positive about care. No suggestions for improvement.

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[1] Refers to questions on Postoperative Interview Guide.

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Title: PATIENT SATISFACTION WITH HEALTH CARE SURVEY

Author: Linn, Lawrence

Variable: The instrument measures a patient's perceptions of the health care received in an outpatient or a primary care setting.

Description:

Nature and Content: The Patient Survey is a 21-item, self-administered, attitude-probing questionnaire to be completed by the patient immediately after having received medical care in an outpatient clinic or in a primary care setting. The respondent is asked to record his evaluation of treatment just received and sources of satisfaction or dissatisfaction with the experience. Some are answerable only if the patient has seen a physician or only if the patient has had care from a nurse. An additional six questions cover demographic characteristics of the respondent. Answer choices are printed on the instrument and require only that the respondent check the appropriate space. The instrument is available in English and Spanish.

Administration and Scoring: This questionnaire requires approximately 10 to 15 minutes to complete and, as noted above, requires only that the respondent place checks beside the answer of choice.

Development:

Rationale: No information was provided.

Source of Items: No information was provided.

Procedure for Development: No information was provided.

Reliability and Validity: No information was provided.

Use in Research: The instrument's use has been described in the two published articles by Linn, referenced below. In these, Linn described a study conducted in 10 southern California ambulatory health care settings which employed nurse practitioners educated in the UCLA Primex program in 1973 and 1974. The purpose of the study was to investigate patient acceptance of the family nurse practitioner. The total number of completed instruments analyzed was 1,667.

Comments: This instrument is still in the early stages of development, and no reliability or validity data are available. As it currently stands, this instrument provides only descriptive data. However, a score system could be developed which would provide the potential user with quantifiable data. The author provided the following information, "Many items do not discriminate well . . ." (Linn, personal communication, 1975). However, this is a common problem in patient satisfaction measures.

References:

Linn, Lawrence. Factors associated with patient evaluation of health care. *Health and Society*, fall 1975, 531–548.

_____. Patient acceptance of the family nurse practitioner. *Medical Care*, 1976, *14* (4), 357–364.

Source of Information:

Lawrence Linn, Ph.D.
Health Service Research Center
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Los Angeles, Calif. 90024

Instrument Copyright: None.

Linn, Lawrence

PATIENT SATISFACTION WITH HEALTH CARE SURVEY

Directions: The people who have just given you medical care are interested in how they can do a better job. In order to help them find out, we are asking you to fill out this survey about the care you just received. Your answers will be kept private so that you can feel free to answer the questions in a straightforward and honest way. Be sure to answer all of the questions on this page. Answer 7A through 7D only if you saw a physician as part of your visit. Answer questions 8A through 8D if a nurse treated you today. If both treated you, answer all of the questions. Thank you very much for your help , and if you have any problems with the questions, ask for help.

1. Would you say that getting today's appointment was more trouble for you than usual, about the same, or less trouble?
   (CHECK ONE)
   more trouble ______
   about the same ______
   less trouble ______

2. Regarding today's visit, would you say you spent more time waiting in the office than usual, about the same, or less time?
   (CHECK ONE)
   more time ______
   about the same ______
   less time ______

3. Do you feel that the medical attention you received today is better than what most people get, about the same, or not as good?
   (CHECK ONE)
   better ______
   about the same ______
   not as good ______

4. Regarding today's visit, do you feel that there were any tests or procedures used on you which were not necessary?
   yes ______
   no ______

5. Regarding today's visit, do you feel that more tests or procedures were necessary to understand your problem?
   yes ______
   no ______

6. Would you say that the medical care you received today was better than usual visits, about the same, or not as good
   (CHECK ONE)
   better than ______
   about the same ______
   not as good ______

7. Did you see a doctor today as part of your medical visit or examination?

   Yes ______ (IF YES, answer questions 7A-7D on page 2)
   No ______ (IF NO, SKIP page 2 and answer question 8, page 3)

(ANSWER QUESTIONS ON THIS PAGE ONLY IF YOU SAW A DOCTOR AS PART OF YOUR VISIT TODAY)

7A. Would you say that the doctor spent more than enough time with you today, enough, time, or not enough time?

(CHECK ONE)

spent more than enough time ____
spent enough time ____
not enough time ____

7B. Do you feel that the doctor understood what was bothering you?

(CHECK ONE)

understood very well ____
understood somewhat ____
didn't understand very well ____
didn't understand at all ____

7C. How much interest and concern did the doctor show for you? Was the doctor:

(CHECK ONE)

extremely concerned ____
very concerned ____
somewhat concerned ____
somewhat unconcerned ____
very unconcerned ____
extremely unconcerned ____

7D. In general, how satisfied were you with today's contact with the doctor?

(CHECK ONE)

extremely satisfied ____
very satisfied ____
somewhat satisfied ____
somewhat dissatisfied ____
very dissatisfied ____
extremely dissatisfied ____

8. Did a nurse examine or treat you today as part of your medical visit?

Yes _____ (IF YES, answer questions 8A-8D on this page)
No _____ (IF NO, go to page 4 and answer questions 9-16)

8A. Would you say that the nurse spent more than enough time with you today, enough time, or not enough time?
(CHECK ONE)
spent more than enough time _____
spent enough time _____
not enough time _____

8B. Do you feel that the nurse understood what was bothering you?
(CHECK ONE)
understood very well _____
understood somewhat _____
didn't understand very well _____
didn't understand at all _____

8C. How much interest and concern did the nurse show for you? Was the nurse:
(CHECK ONE)
extremely concerned _____
very concerned _____
somewhat concerned _____
somewhat unconcerned _____
very unconcerned _____
extremely unconcerned _____

8D. In general, how satisfied were you with today's contact with the nurse?
(CHECK ONE)
extremely satisfied _____
very satisfied _____
somewhat satisfied _____
somewhat dissatisfied _____
very dissatisfied _____
extremely dissatisfied _____

9. How well do you feel you understand your present medical condition? (CHECK ONE)

I understand very well ____
I think I understand ____
I am not sure I understand ____
I don't understand very well ____

10. Finally, we would like to ask you some general information questions. First of all, are you: (CHECK ONE)

single ____
married ____
separated ____
widowed ____
divorced ____

11. How far did you get in school: (CHECK ONE)

some grade school ____
finished grade school ____
some high school ____
finished high school ____
some vocational or tech school ____
finished vocational or tech school ____
some college ____
finished college ____

12. In what religion were you raised? (CHECK ONE)

Catholic ____
Protestant ____
Jewish ____
Other (specify ________) ____
None ____

13. Sex

Male ____
Female ____

14. Race or ethnic background: (CHECK ONE)

Black ____
Caucasian ____
Mexican-American ____
Oriental ____
Other ____

15. What is your date of birth? ____________________

16. In general, how satisfied are you with living in your community? Would you say:
(CHECK ONE)

extremely satisfied ____
very satisfied ____
somewhat satisfied ____
somewhat dissatisfied ____
very dissatisfied ____
extremely dissatisfied ____

17. How friendly was the person(s) who gave you medical care today?
(CHECK ONE)

extremely friendly ____
very friendly ____
somewhat friendly ____
not very friendly ____
not at all friendly ____

18. How comfortable did the person(s) who gave you medical care today make you feel?
(CHECK ONE)

extremely comfortable ____
very comfortable ____
somewhat comfortable ____
not very comfortable ____
not at all comfortable ____

19. Which of the following statements best describes your feelings about the person(s) who gave you medical care today?
(CHECK ONE)

I would prefer to see the same person(s) again ____
It wouldn't make much difference whether or not I saw the same person on my next visit ____
I would prefer to see someone else ____

Title: PATIENT SATISFACTION SCALE

Author: McGivern, Diane O.

Variables: A patient's perceptions of hospital experiences and health care personnel are the variables.

Description:

Nature and Content: This is a self-administered, 21-item instrument made up of direct questions which pertain to physicians, nurses, hospital routines and regulations, and general hospital care. Responses are made on a 4-choice, Likert-type scale.

Administration and Scoring: No special provisions are necessary for administration of the instrument; directions for completing the scale precede the first item. Approximately 30 minutes are required for completion of the scale.

A value of 1 is given to the response indicating greatest satisfaction, and the value of 4 is assigned to the response representing the least favorable appraisal. The favorable and unfavorable ends of the scale are randomly alternated to offset response set. The total sum represents the patient's level of satisfaction with his(her) hospital experience.

Development:

Rationale: No information concerning an underlying theoretical rationale was provided.

Source of Items: The items were based upon a review of the literature, the author's professional experience and the Evans Satisfaction Scale (1960).

Procedure for Development: The author adapted the Evans Satisfaction Scale by substituting the word "nurse" for the word "doctor" in items 9, 10, 11, 13, 14, 15, and 18; the word "information" for the word "pass" in item 1; and the phrase "your illness" for the word "TB" in item 10.

Reliability and Validity: No reliability information for the author's adapted version of the Evans Scale was provided. For the original Evans Scale, a coefficient of 0.92 was obtained using the Kuder-Richardson split-half reliability formula.

The instrument has face validity, and Evans reported that validation of his version of the instrument had been established through a review of anecdotal records which indicated that those wards observed as having high and low levels of satisfaction also had high and low mean scores, respectively, on the instrument.

Use in Research: Evans (1960) developed and used the original instrument with a hospital population of 887. In the Evans study, the patient sample was controlled for diagnosis, type of institution, and financial status of patients within the institutions. McGivern (1972) used her adapted version of the instrument, a semantic differential scale, and the Buss-Durkee Aggression Scale in her doctoral study, which is referenced below.

Comments: The instrument appears to be easy to administer and readily usable by health care personnel; however, each investigator must establish its reliability for his(her) own subjects and setting. The instrument appears to be easily adaptable to a variety of health care settings. Some of the items should be refined, e.g., the substitution of the word "information" for the word "pass" in item 1, has made the item illogical.

References:

Evans, John W. *Stratification, alienation, and the hospital setting: A study in the social psychology of chronic illness.* Unpublished doctoral dissertation, Ohio State University, Columbus, 1960.

McGivern, Diane O. *The relationship between aggression in selected male surgical patients, satisfaction with hospitalization, and attitudes of nursing personnel.* Unpublished doctoral dissertation, New York University, 1972.

Source of Information:

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Instrument Copyright: Diane O. McGivern, R.N., Ph.D.

McGivern, Diane O.

PATIENT SATISFACTION SCALE

We are interested in how you have felt about your stay in the hospital. Your answers to these questions will be kept confidential.

On each question, circle the X above the answer you think best describes your situation on this unit at this hospital.

Important: Some of the questions ask about "the nurse"; when answering these questions, think of the nurse who sees you most often or who is mainly in charge of your care.

1. Do you think the way information is given out here is fair to everybody?

X	X	X	X
Always fair to everybody	Usually fair to everybody	Often unfair	Very often unfair

2. Do you think the doctor sees you as often as he should?

X	X	X	X
Definitely as often as he should	Almost as often	Less often than he should	Not nearly so often as he should

3. Do you feel that you have been placed in the right "exercise classification?"

X	X	X	X
Definitely the right amount of time up	Almost the right amount	Not quite enough	Definitely not enough

4. Do you think you are told enough about your illness and how you are coming along?

X	X	X	X
I'm kept well-informed and up-to-date	I'm kept fairly well informed	I'm not told as much as I would like	There are many important things I'm not told

5. Have you ever become so fed-up with things that you felt like getting up and walking out? (That is, going AMA?)

X	X	X	X
Many times	Fairly often	Occasionally	Hardly ever

6. How often does it happen that what the nurse tells you goes against what the doctor tells you?

X	X	X	X
It happens all the time	It happens fairly often	It happens occasionally	It hardly ever happens

7. Do you think this hospital allows enough visiting time for friends and relatives?

X	X	X	X
Enough time	Almost enough time	Less than there should be	Much less than there should be

8. Do you feel that your doctor holds back certain information about your case?

X	X	X	X
Very often	Fairly often	Occasionally	Hardly ever

9. How well does the nurse explain things to you?

X	X	X	X
Very well	Fairly well	Not very well	Very poorly

10. How would you rate your nurse on how much she knows about your illness and other medical matters?

X	X	X	X
Very good	Good	Fair	Poor

11. How would you rate your nurse on the friendliness and understanding she has with patients?

X	X	X	X
Very good	Good	Fair	Poor

12. In general, how do you feel about this ward or division?

X	X	X	X
I like it very much	I like it fairly well	It's just so-so	I would like to be transferred

13. When the nurse makes rounds does she go from room to room so fast that you don't get to talk to her or ask her the questions you would like to?

X	X	X	X
Almost always	Fairly often	Occasionally	Hardly ever

14. Do you ever have the feeling that the nurse does not really have much interest in your case?

X	X	X	X
I have this feeling very often	Fairly often	Occasionally	Hardly ever

15. Does the nurse ever act as though she thinks you're not able to understand anything about your illness?

X	X	X	X
Very often	Fairly often	Occasionally	Hardly ever

16. Do you feel that patients on this ward or division are treated more like "cases" than individuals?

X	X	X	X
This is true very often	This is true fairly often	This is true occasionally	This is hardly ever true

17. Whenever you are to receive a new treatment, medication, test, etc., is it explained to you ahead of time?

X	X	X	X
Almost always	Usually	Not usually	Hardly ever

18. Do you think the nurse is the type of woman you can really put your trust in?

X	X	X	X
Very definitely	Pretty much	More or less	Hardly at all

19. Do you think the patients here have to put up with too many unnecessary rules and regulations?

X	X	X	X
Most of the time	Fairly often	Occasionally	Hardly ever

20. In general, how good a job do you think the staff here does in treating patients and getting them well?

X	X	X	X
Very good	Good	Fair	Poor

21. In general, how good a job do you think the staff here does in making the patients happy and comfortable?

X	X	X	X
Very good	Good	Fair	Poor

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Title: PATIENTS' PERCEPTIONS OF HOSPITALIZATION IN ARMY HOSPITALS

Authors: Nichols, Glennadee, Kennedy, Eunice, Koneck, Anna, Petrello, Judith, and Hurd, Waltraut

Variables: This questionnaire measures the importance of, and satisfaction or dissatisfaction with, selected aspects of a patient's hospitalization in an army hospital. Importance is defined as a respondent's perception of the worth of selected aspects of his(her) hospitalization. Satisfaction is defined as a respondent's positive attitude toward the same selected aspects; dissatisfaction is defined as a respondent's negative attitude toward selected aspects of his(her) hospitalization (Nichols et al., 1974).

Description:

Nature and Content: This self-administered instrument is a comprehensive, 161-item questionnaire designed for studying patients' perceptions of care in Army hospital facilities. The instrument is divided into three sections, and each item is to be answered by circling a number next to the answer the respondent chooses. The number of response choices varies from 4 to 5 for most items.

Section I: *You and Your Health Status* consists of 15 items of demographic data and 10 items related to current health status. An example is:

16. How sick do you think you were on admission to the hospital?

Very Sick	1
Moderately Sick	2
Minimally Sick	3
Not Sick	4

Section II: *Items of Importance to You* consists of 68 items for which the respondent is given these instructions: "Listed below are several items. Please indicate your feelings about the importance to you by circling the number next to the answer you wish to give. Respond to each item as it applies to you now." An example is:

13. Having diagnostic tests (laboratory, X-ray, etc.) explained ahead of time so I know what to expect.

Does Not Apply	0
Not Important	1
Somewhat Important	2
Moderately Important	3
Very Important	4

Section III: *Items Satisfying or Dissatisfying to You* consist of 68 items for which the following instructions are provided:

Considering the same items you have already marked for importance, please indicate your level of satisfaction with the items during this hospitalization. . . . Respond to each item as it applies to you at the present time.

13. Having diagnostic tests (laboratory, X-ray, etc.) explained ahead of time so I know what to expect.

Does Not Apply	0
Very Dissatisfied	1
Dissatisfied	2
Satisfied	3
Very Satisfied	4

Administration and Scoring: The respondent must be able to read, write, and understand English with some degree of competence, and must be physically and mentally able to complete the questionnaire. Completion time required varies but averages 30 minutes or less.

Two indices, Level of Wellness and Level of Satisfaction are determined for each respondent. A Level of Wellness Index is derived by adding the numerical ratings given by each respondent on the Level of Wellness Scale (items 16 through 25 in Section I). This index can range from 10 to 42, and the higher a respondent's score, the higher his(her) perceived level of wellness.

A Level of Satisfaction Index is derived also. For each item on the Satisfaction Scale (Section III) the numerical rating assigned to the degree of satisfaction is: very dissatisfied $= -2$, dissatisfied $= -1$, satisfied $= +1$, and very satisfied $= +2$. The assigned rating for each circled item on the Satisfaction Scale is multiplied by the numerical rating (which ranges from 1 to 4) for the same item on the Importance Scale (Section II), and the sum of the products is divided by the number of items answered. All items not answered or marked "does not apply" are deleted. The Satisfaction Index could range from $+8$ to -8. In order to have only positive numbers, a constant of 8 is added to each respondent's index. The maximum possible Satisfaction Index is 16, indicating high satisfaction with selected aspects of hospitalization, and the minimum possible is 0, denoting great dissatisfaction.

Development:

Rationale: In the interest and welfare of all patients, health personnel in all army facilities must be appraised of the aspects of care that are satisfying to patients and those aspects not meeting consumer needs. This instrument was developed and used as one means of determining the patients' perceptions of care.

Source of Items: The items were based upon a review of the literature and the authors' professional experience.

Procedure for Development:

An interview schedule, consisting of both fixed-alternative and open-ended questions, was used with 20 hospitalized adult men and women. The information sought concerned physical, medical, psychosocial, environmental, and administrative aspects of hospital care. All interviewees also responded to sample instruments [illegible] assessing the importance of, and satisfaction with, items related to hospitalization.

A questionnaire was then constructed using the information derived from the interview data. Twenty patients were asked to complete it and make suggestions about the clarity of the items and instructions. After revision based upon patients' answers and suggestions, the questionnaire was distributed to 25 patients in a large Army hospital and a small Army hospital for the pilot study. The final instrument for data collection was based upon the results of the pilot phase.

The items for the Importance Scale and the Satisfaction Scale were derived as follows: initially, there were 114 items for each of these scales. When they were refined, the number was reduced to 68. A preliminary testing of the items showed that none of them was perceived as unimportant to many patients; therefore, all were used in the final questionnaire. The 68 items of each scale were placed in their final order by random assignment (Nichols et al., 1974).

Reliability and Validity: Nichols et al. (1974) reported the reliability coefficients for both the Importance Scale and the Satisfaction Scale as 0.96.

Use in Research: The development and use of the instrument are described in Nichols et al. (1974). Data were collected from a total of 562 adult medical-surgical patients hospitalized in 11 different army medical facilities.

Comments: This instrument appears well designed to tap the dimensions of patient satisfaction-dissatisfaction and the concept of the importance of certain aspects of hospitalization. The length of the measure is sufficient to derive the high reliabilities shown. An item analysis and a cluster analysis might show that the instrument could be shortened without weakening its reliability. A statement in the Nichols et al. (1974) paper referring to a "maximum validity coefficient" refers only to a theoretical upper ceiling. Validity was apparently not tested, and a validity coefficient can, therefore, not be specified.

Because of its length, the instrument is not reproduced in this compilation.

References:

Kerlinger, Fred. *Foundations of behavioral research.* New York: Holt, Rinehart, and Winston, Inc., 1964, 432–439.

Nichols, Glennadee, Kennedy, Eunice, Koneck, Anna, Petrello, Judith, and Hurd, Waltraut. Patients' perceptions of important, satisfying, and dissatisfying aspects of army hospitalization. *Military Medicine,* 1974, *139* (11), 869–876.

Source of Information:

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Instrument Copyright:

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Title: PATIENT'S PERCEPTION OF ASPECTS OF HEALTH CARE

Author: Pankratz, Deanna

Variables: The variables measured are a patient's perceptions of the importance of selected aspects of health care in hospitals and the patient's degree of personal satisfaction with those aspects of health care.

Description:

Nature and Content: This is a self-administered, 14-item rating scale. Aspects of health care includes such items as "helpfulness of general hospital personnel—the way problems and complaints are handled"; "your understanding of your condition or diagnosis"; and "skill and competence of the nurses." Using the response choices, extremely important, important, slightly important, or not important, the respondent indicates the degree of importance of each of the aspects of health care to him(her); using the response choices, very satisfied, satisfied, unsatisfied, very unsatisfied, the respondent indicates his(her) satisfaction with each aspect of care as experienced in the hospital.

Administration and Scoring: For information on administration and scoring, any potential user is asked to contact the person named under *Source of Information* below.

Development:

Rationale: No underlying theoretical rationale was identified by the author.

Source of Items: The items are based upon the author's professional experience, a review of literature, and the work of Freeborn and Greenlick (1973).

Procedure for Development: Freeborn and Greenlick (1973) identified a framework for evaluating health care. Their system included accessibility and quality of care, process of care and interpersonal relationships, and system arrangements. Using layman's language, the author constructed questions tapping these dimensions.

Reliability and Validity: No information was provided.

Use in Research: No information was provided.

Comments: This instrument is still in early stages of development, and the author states that validation and baseline data are needed and that the items should be refined to be more "situation specific" before this questionnaire can be used in any major study. The double response to each item, based on its importance to the patient and the patient's satisfaction with that aspect of health care, enables the researcher to determine each subject's need pattern for health care *and* the extent to which those needs are being met. The instrument should be lengthened to improve reliability and to sample more diverse aspects of care in hospitals.

References:

Freeborn, D., and Greenlick, M. Evaluation of the performance of ambulatory care systems. *Medical Care*, Supplement 1973, *11* (2).

Source of Information:

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Portland, Oreg. 97207

Instrument Copyright: None.

Pankratz, Deanna

PATIENT'S PERCEPTION OF ASPECTS OF HEALTH CARE

Here is a list of conditions which some people feel are important aspects of health care in hospitals. Some of them may be more important than others, and some may not be important at all. Please read each item. In the first set of boxes check the box which best indicates the importance to you. In the second set of boxes check the box which best indicates your satisfaction with this aspect of health care in this hospital.

	Extremely Important	Important	Slightly Important	Not Important	Very Satisfied	Satisfied	Unsatisfied	Very Unsatisfied
Example Quality of the food		X			X			
Items • Helpfulness of general hospital personnel - the way problems and complaints are handled								
• Your trust and confidence in your doctor								
• Your trust and confidence in the nurses								
• Your understanding of your condition or diagnosis								
• Your understanding of your doctor's instructions and plans for your care								
• Availability of services when needed								
• Ease in obtaining services								
• Your understanding of how the hospital operates								
• Skill and competence of your doctor								
• Skill and competence of the nurses								

	Extremely Important	Important	Slightly Important	Not Important	Very Satisfied	Satisfied	Un-satisfied	Very Un-satisfied
• Your doctor's interest and concern for you								
• The nurses' interest and concern for you								
• Physical surroundings and facilities								
• Waiting time for help or services								

Title: PATIENT INTERVEIW QUESTIONNAIRE

Author: Pienschke, Darlene

Variables: Patient confidence and patient satisfaction with care are the variables assessed.

Description:

Nature and Content: This instrument is made up of 28 questions about various aspects of the care received by patients while they are in a hospital. The instrument has two main sections. The first is administered by an interviewer, the second by the patient. Both sections include both open-ended questions and those having a variety of structured response alternatives.

Administration and Scoring: No special training is required to administer the instrument. Information on the categorization of the questions and the coding of responses must be obtained from the author.

Development:

Rationale: The instrument was developed to obtain data for indicating the consequences of differing approaches to giving cancer patients information about their diagnosis and prognosis.

Source of Items: The items were based upon the work of Johnson and Thielbar (1971) and the author's own experiences.

Procedure for Development: The instrument was then administered to a sample of 32 patients who had been diagnosed as having cancer.

Reliability and Validity: No information was provided regarding reliability.

Pienschke's (1973) results indicate that approximately half of the patients wanted more information relative to their diagnosis and prognosis; the other half were satisfied with the amount of information they received. The author noted a tendency for patients who received more information to be more satisfied with the care they received in the hospital. No statistical information was provided that could be used to evaluate this tendency, and only a small portion of the instrument deals with information per se.

Use in Research: Pienschke's (1973) description of use of this instrument, along with her Physician Checklist and Nurse Perceptions Questionnaire, can be found in the article referenced below.

Comments: Due to the limited number of patients who were used in the development of the tool and the lack of information about psychometric properties of the instrument, it is premature to draw any conclusions regarding the ultimate usefulness of this instrument. Any potential user should examine the conceptualization of the variables, the content, the response choices of the items, and the reliability and validity of the instrument for his(her) purposes.

References:

Johnson, J., and Thielbar, G. W. *Pretest of the impact of patient welfare of pharmacist assistants administering medications.* Madison, Wisconsin: University of Wisconsin School of Nursing, 1971. Mimeographed.

Pienschke, Sr. Darlene. Guardedness or openness on the cancer unit. *Nursing Research,* 1973, *22* (6), 484–490.

Source of Information:

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Instrument Copyright: Sr. Darlene Pienschke, B.S., M.S.

Pienschke, Darlene

PATIENT INTERVIEW QUESTIONNAIRE

Hello (Mr.; Mrs.; Miss) _______________, I am _____________, a registered nurse. We are attempting to evaluate some aspects of the care we are giving patients. We would like to ask you some questions about your experience as a patient. Your doctor has assured me that you can participate in the study. Would you mind answering several questions about different aspects of your care?

Patient Interview:

What are you in the hospital for? ______________________________________

How long have you been in the hospital _________________ (# of days) and when do you expect to be able to leave the hospital ______________________________ (date of expected discharge)

1. Have you had problems with eating or drinking today?

   _____ Yes
   _____ No

   A. If yes, did the staff do anything to help you with your problem of eating and drinking?
      _____ Yes
      _____ No

   B. If help received, how much did it help?
      _____ Problem under control or solved
      _____ About as much help as is possible
      _____ More help should be possible
      _____ It did not help

2. Have you had problems with physical activity like getting up or moving today?

   _____ Yes
   _____ No

   A. If yes, did the staff do anything to help you with your problem of getting up and moving?
      _____ Yes
      _____ No

   B. If help received, how much did it help?
      _____ Problem under control or solved
      _____ About as much help as is possible
      _____ More help should be possible
      _____ It did not help

3. Have you had problems getting rest or sleep today?

_____ Yes
_____ No

A. If yes, did the staff do anything to help you rest or sleep?
_____ Yes
_____ No

B. If help received, how much did it help?
_____ Problem under control or solved
_____ About as much help as is possible
_____ More help should be possible
_____ It did not help

4. Have you had pain today?

_____ Yes
_____ No

A. If yes, did the staff do anything to relieve your pain?
_____ Yes
_____ No

B. If help received, how much did it help?
_____ Problem under control or solved
_____ About as much help as is possible
_____ More help should be possible
_____ It did not help

5. Have you had problems with bowel movements or urinating today?

_____ Yes
_____ No

A. If yes, did the staff do anything about your ____________ problem?
_____ Yes
_____ No

B. If help received, how much did it help?
_____ Problem under control or solved
_____ About as much help as is possible
_____ More help should be possible
_____ It did not help

6. Have you had any reactions to medications today?

_____ Yes
_____ No

A. If yes, did the staff do anything about your medication reaction?
_____ Yes
_____ No

B. If help received, how much did it help?
_____ Problem under control or solved
_____ About as much help as is possible
_____ More help should be possible
_____ It did not help

7. Have you had any problems with respiration, e.g., coughing or getting your breath today?

_____ Yes
_____ No

A. If yes, did the staff do anything about your trouble with __________?
_____ Yes
_____ No

B. If help received, how much did it help?
_____ Problem under control or solved
_____ About as much help as is possible
_____ More help should be possible
_____ It did not help

Instruction to Interviewer: Using the Patient Questionnaire, for those patients admitted to the study by the physician, use the following introduction?

Now, I would like to get your answers to a number of detailed questions regarding your satisfaction about certain aspects of your care. These questions are on a sheet that you can fill out. (Hand the patient the Questionnaire.)

READ THE FOLLOWING TO THE PATIENT: You are to answer the following questions by marking the scales directly under the questions. After you have read the question, read the labels on the scales and decide where your answer falls. You may mark at the labeled points or in-between, whichever best suits your answer. There are no right or wrong answers. Confidentiality of your replies will be respected.

When the patient has finished the Questionnaire.

Have you had difficulty getting the information that you feel you need?

_____ Yes _____ No

If yes, a. What information have you felt you needed and have had difficulty getting?

____

b. What is the source of that difficulty?

____

Are you getting any information that you feel is not necessary to know?

_____ Yes _____ No

If yes, a. Can you tell me about it?

TERMINATION OF INTERVIEW: Thank you for your cooperation (Mr.; Mrs.: Miss) __________________. You can be assured that all information will be kept confidential.

1. Rate the amount of information provided about your condition.

want a great deal more information	want somewhat more information	satisfied with information	want somewhat less information	want a great deal less information

2. What information about your condition would you like your doctor to discuss further with you?

3. Rate the amount of information your doctor has given to you about your treatment.

want a great deal more information	want somewhat more information	satisfied with information	want somewhat less information	want a great deal less information

4. What information about your treatment would you like your doctor to discuss further with you.

5. Would you rate the degree of confidence you have in your doctor?

Extremely confident	Very confident	Moderately confident	Slightly confident	Not at all confident

6. What has influenced the degree of confidence you feel in your doctor?

7. To what degree do you feel your questions have been answered by your doctor?

Completely answered	Answered	Somewhat answered	Somewhat unanswered	Unanswered

8. To what degree do you feel your doctor understands the problems you are facing?

Extremely understanding	Very understanding	Moderately understanding	Slightly understanding	Does not understand

9. Rate the degree to which you understand what the doctor has told you.

Completely understood	Understood	Somewhat understood	Some doubts	Did not understand

10. Check the statements that apply to the way you feel about receiving information.

____ Prefer my doctor to give me information without my having to ask questions.
____ Prefer to ask my doctor for information.
____ Prefer information from my doctor a little at a time.

Other (State briefly) ______________________________

____

11. Rate the degree to which you hesitate to ask for information.

Never hesitate	Sometimes hesitate	Frequently hesitate	Very frequently hesitate	Always hesitate

12. Would you rate the degree of confidence you have in your nurses?

Extremely confident	Very confident	Moderately confident	Slightly confident	Not at all confident

13. What has influenced the degree of confidence you feel in your nurses?

14. To what degree do you feel the nurses understand the problems you are facing?

Extremely understanding	Very understanding	Moderately understanding	Slightly understanding	Does not understand

15. Check the statements if they apply to the way you feel about your care.

_____ Want better care given by the nurse.
_____ Want more time to talk with the nurse.
_____ Want more time to talk with the doctor.

16. How could the nurses improve the care they are giving you?

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Title: RISSER PATIENT SATISFACTION SCALE

Author: Risser, Nancy

Variables: The variables being measured by this instrument are patients' attitudes toward nurses and nursing care in a primary health care setting. According to the instrument's author, "attitude" is an affective component which is based upon cognitive processes and is an antecedent of behavior. "Patient satisfaction with nursing care" is conceptualized as the degree of congruency between a patient's expectations of ideal nursing care and his perception of the real nursing care he receives.

Description:

Nature and Content: This self-reporting attitude scale in its final form contains 25 items subdivided into three subscales:

1. *technical-professional* behavior of the nurse; for example, nurse knowledge, physical care for the patient, and expertise in implementing medical care (7 items);
2. *interpersonal-educational* items which deal with the social aspects of nursing care as well as the information exchange between patient and nurse—such as answering questions, explaining, and demonstrating (7 items);
3. *interpersonal-trusting* relationship dimension, such as sensitivity to people and their feelings, and listening to patient problems (11 items).

Respondents indicate agreement or disagreement with the statements on a 5-point, Likert-type scale from "strongly agree" to "strongly disagree." Roughly equal numbers of positive and negative items are included. An attempt was made to use simple and clear language and terminology which patients themselves are likely to employ.

One example from each subscale follows: *Technical-professional area*—"The nurse really knows what she is talking about." *Educational relationship area*—"I wish the nurse would tell me about the results of my tests more than she does." *Trusting relationship area*–-"When I need to talk to someone, I can go to the nurse with my problems."

Administration and Scoring: The questionnaire can be administered with relative ease in physicians' offices, clinics, and in other ambulatory care settings. It obviously must be limited to patients other than those having a first appointment, since they would likely have no previous experience on which to base their attitudes. An approximate fifth grade reading level is required to answer the questions. The scale requires only 10 or 15 minutes to complete.

For the positive items, scores are assigned from 1 (strongly agree) to 5 (strongly disagree); for negative items, scores are reversed. Thus a low score indicates relative satisfaction with nursing service while a high score indicates relative dissatisfaction with nursing service.

Development:

Rationale: As Donabedian (1969) pointed out, the patient and the provider of the health care services may differ significantly in their perceptions of what quality care is and to what extent it is present. The instrument was developed to evaluate patient care from the patient's perspective.

Source of Items: Items for the scale were selected from other measures concerned with attitudes toward medical and nursing personnel, from interviews with patients and nurses, and from the literature to provide an initial pool of 58 items from which 25 were eventually selected.

Procedure for Development: The samples used in the development of this instrument were drawn from a population of patients who received care on an ambulatory basis in doctors' offices where registered nurses interacted directly with the patients in the delivery of nursing care. A wide range of demographic characteristics was represented in the patient samples.

The original 58 items were pretested with a group of 10 patients to determine the items' clarity. The scale was then administered to a sample of 78 patients and the responses were analyzed. An item analysis was performed to locate those items which best discriminated subjects. The inter-item correlations were examined to see how the items grouped with reference to four original dimensions. Following these analyses, the number of items was reduced to 27 and the number of dimensions to three (technical-professional, educational-relationship, trusting-relationship). At this point, some items were rewritten to minimize response set.

The revised scale was administered to a sample of 60 patients. Based on the results of this sample, two items were eliminated due to their low correlations with the other items.

Reliability and Validity: Internal consistency for this instrument was estimated by Cronbach's alpha and Scott's homogeneity ratio. The calculated alpha reliability for the total scale (25 items) was 0.912. Reliabilities for the subscales were somewhat lower. The homogeneity ratio for the total scale was 0.302. The homogeneity ratio is similar to a weighted average of the inter-item correlations.

The computed values of alpha for the three subscales were respectively: 0.637, 0.825, and 0.819, with the first subscale (technical-professional) being the least reliable of the three.

The subscales were also shown to have correlations with each other ranging from 0.598 to 0.806, which indicates that the content measured by the three scales may indeed be quite similar.

Content validity was determined through the method of item selection and revision. The distribution of scores was found to be positively skewed. The instrument's author considered this fact to be indicative of content validity, because other estimates of patient satisfaction exhibit similar skewness.

Use in Research: The development of the instrument was described in a University of Washington master's thesis "Development of a Tool to Measure Patient Satisfaction with Nurses and Nursing Care in Primary Care Settings" (Risser, 1972). It was also reported in a journal article "Development of an Instrument to Measure Patient Satisfaction with Nurses and Nursing Care in Primary Care Settings" (Risser, 1975).

Comments: This instrument appears to have undergone a sound conceptual and methodological development. It appears to have good reliability while still maintaining brevity and ease of administration.

Validation of this instrument, with reference to external criteria, is still a necessity. One should also examine whether the inclusion of subscales adds any information in light of the intercorrelations between those scales.

This instrument, through the use of attitude assessment, might well make a contribution to the methods of measuring patient satisfaction with nursing care.

References:

Donabedian, Avedis. *A guide to medical care administration, Vol. 2: medical care appraisal.* New York: American Public Health Association, 1969.

Risser, Nancy. *Development of a tool to measure patient satisfaction with nurses and nursing care in primary care settings.* Unpublished master's thesis, University of Washington, 1972.

———. Development of an instrument to measure patient satisfaction with nurses and nursing care in primary care settings. *Nursing Research*, 1975, *24* (1), 45–52.

Sedlacek, Dawn. *Consumer satisfaction with expanded nursing roles in primary care settings.* Master's thesis, University of Washington, 1973.

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Risser, Nancy

RISSER PATIENT SATISFACTION SCALE

This questionnaire is designed to find out what kinds of things patients like or don't like about the nursing care they receive in their doctors' offices. Your ideas, along with those of other patients, will be used to try to improve the care you are now receiving here.

This questionnaire contains a number of statements, each of which says something different about nurses. For each statement, decide how much you agree or disagree with the view expressed. Think about the care you are now receiving here as you respond to each statement. In a column next to the statements you will find five words to use to describe your opinion. Circle the number under the word which comes closest to your own opinion. There are no right or wrong answers. People differ in their views. Your response is a matter of your personal opinion.

People here at know that I am asking for your help. But no one here will see the way you answer this questionnaire. The information you give me will be completely confidential.

If, for any reason, you do not feel you are able to complete this questionnaire, please feel free to hand it back to me unfinished.

THANK YOU very much for your time and your help. Below is an example which may help you in completing the questionnaire.

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
A. The nurse thinks I understand more than I really do.	[✓ 1]	2	3	4	5
B. Nurses are put in the position of needing to know more than they possibly could.	1	2	[✓ 3]	4	5

The answer to question A indicates that you are quite certain that the nurse thinks you understand more than you really do. The answer to question B, "neutral," indicates you can't quite decide whether to agree or to disagree with this statement.

Circle the number under the word which comes closest to your own opinion.
PLEASE BE SURE TO MARK EVERY STATEMENT

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1	The nurse is skillful in assisting the doctor with procedures.	1	2	3	4	5
2	The nurse is understanding in listening to a patient's problems.	1	2	3	4	5
3	The nurse really knows what she is talking about.	1	2	3	4	5
4	The nurse doesn't always tell me what effects to expect from my drugs like she could.	1	2	3	4	5
5	The nurse explains things in simple language.	1	2	3	4	5
6	It is always easy to understand what the nurse is talking about.	1	2	3	4	5
7	The nurse should be more attentive than she is.	1	2	3	4	5
8	The nurse is just not patient enough.	1	2	3	4	5
9	The nurse is not precise in doing her work.	1	2	3	4	5
10	When I need to talk to someone, I can go to the nurse with my problems.	1	2	3	4	5
		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
11	The nurse is too busy at the desk to spend time talking with me.	1	2	3	4	5
12	The nurse makes it a point to show me how to carry out the doctor's orders.	1	2	3	4	5
13	The nurse is too slow to do things for me.	1	2	3	4	5
14	The nurse is pleasant to be around.	1	2	3	4	5
15	The nurse forgets to make sure that I know how and when to take my medicine.	1	2	3	4	5
16	The nurse is often too disorganized to appear calm.	1	2	3	4	5
17	Too often the nurse thinks you can't understand the medical explanation of your illness, so she just doesn't bother to explain.	1	2	3	4	5
18	The nurse always gives complete enough explanations of why tests are ordered.	1	2	3	4	5
19	I'm tired of the nurse talking down to me.	1	2	3	4	5
20	The nurse is a person who can understand how I feel.	1	2	3	4	5
21	The nurse gives directions too fast.	1	2	3	4	5
22	The nurse gives good advice over the telephone.	1	2	3	4	5
23	The nurse should be more friendly than she is.	1	2	3	4	5
		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE

		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
24	I wish the nurse would tell me about the results of my tests more than she does.	1	2	3	4	5
25	The nurse asks a lot of questions, but once she finds the answers, she doesn't seem to do anything.	1	2	3	4	5
26	The nurse gives directions at just the right speed.	1	2	3	4	5
27	A person feels free to ask the nurse questions.	1	2	3	4	5
28	Just talking to the nurse makes me feel better.	1	2	3	4	5
		STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE

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Title: QUALITY OF NURSING CARE QUESTIONNAIRE—PATIENT

Author: Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

Variables: This instrument elicits information on seven variables which address a patient's perceptions of the quality of nursing care provided in a hospital setting. Five of these variables are: physical care, emotional care, nurse-physician relationship, teaching and preparation for home care, and administration. The sixth variable is called the quality of nursing care. The seventh variable is not named, but it provides information on the degree of satisfaction expressed by a patient regarding the nursing care he(she) has received. No definitions were provided for the variables.

Description:

Nature and Content: This self-administered, 45-item questionnaire was designed to elicit patients' perceptions of the quality of nursing care provided in a hospital setting.

The variables are operationalized by combining responses to various subgroups of questions contained in the instrument. *Physical care* is operationalized by 13 questions; *emotional care* is operationalized by 17 questions; *nurse-physician relationship* is operationalized by 1 question; *teaching and preparation for home care* is operationalized by 7 questions; *administration* is operationalized by 6 questions; and *quality of nursing care* is operationalized by combining the responses to all of the items used in the 5 variables described above. The summary description of the quality of care received is operationalized by one item: "Please indicate which term best describes the nursing care you have received in the past 7 days." A 5-point scale is provided for responses to 40 of the questions. For 39 of these questions, the 5 response categories are: always, usually, sometimes, seldom, and never. The five response categories for the item which summarizes the quality of nursing care are: excellent, very good, satisfactory, only fair, and unsatisfactory. Three response categories are provided to obtain information for the five questions that summarize specific parts of the quality of nursing care. The response categories for these five questions are: yes, partially, and no.

Administration and Scoring: This instrument was designed to be completed by a patient. Instructions are provided as part of the questionnaire. Scores for each variable are computed by assigning a number from 1 to 5 for each of the five response categories such that 1=never, 2=seldom, 3=sometimes, 4=usually, and 5=always. For the three response questions, a numerical value of 1 is assigned to "no," 3 is assigned to "partially," and 5 is assigned to "yes." The score for a given variable is the average of the responses to the subgroup of questions used to measure that variable. Unanswered questions are assigned a numerical value of 3.

Development:

Rationale: The instrument was developed to provide information regarding the relationship between hospital staffing patterns and patients' perceptions of the quality of nursing care they receive.

Source of Items: The items in this questionnaire were developed by a committee made up of nursing and hospital administrators, nursing school faculty, staff physicians, head nurses, patients, and the authors.

Procedure for Development: The various groups of persons identified above were asked to indicate what factors were important to good nursing care and to provide examples of each. These responses were reworded to form statements that could be responded to by patients. The initial form of this instrument was administered to patients on two hospital units. Those items that could not be answered readily or that appeared to be ambiguous were either reworded or eliminated. The scores for respondents who thought the quality of care given was excellent or very good were compared with those who thought the quality of care given was either unsatisfactory or only fair. Scores on the five variables were also compared with those derived from four other questionnaires designed to provide the same type of information but from a different point of view. These were examined in the context of the type of unit or the kind of staffing pattern used on a unit. Three kinds of staffing patterns were examined. The first had 13 patients assigned to a nursing team. The second had 16 patients similarly assigned to a team. The third had 19 patients assigned to a nursing team.

This questionnaire was completed by 139 patients. They were from a 36-bed surgical unit and a 65-bed medical unit of a 340-bed acute general hospital operated under municipal control.

Reliability and Validity: No information was provided regarding the test-retest or

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generalized split-half reliability characteristics of the variables presumably measured by this instrument.

The results for *physical care* indicated a tendency for patients to give higher ratings on this measure than was the case for nursing personnel. Patients typically rated the quality of *physical care* as usually or always adequate, regardless of the staffing condition of their unit. The same tendency was observed for the composite score called *quality of nursing care* and for the variable that provided a summary description of the patients' perceptions of the quality of care they received in the hospital.

Use in Research: Safford and Schlotfeldt (1960) developed and used this instrument along with four others described elsewhere in this compilation for their research referenced below.

Comments: This instrument appears to have potential for providing information on the variables it is presumed to measure. However, because of the limited nature of the information available regarding the characteristics of the variables, it is premature to make any decisions regarding its usefulness.

It would be helpful to have information regarding the test-retest characteristics of the variables. It would also be helpful to have information regarding inter-item and between-variable relationships. The latter information could be used to confirm the assignment of items to specific variables and might indicate the presence of variables other than those presumed to be measured by this instrument. With all this information made available, it would be useful to repeat this study on a much larger sample of patients in a number of facilities where a variety of nursing staffing patterns were used.

References:

Safford, Beverly J., and Schlotfeldt, Rozella M. Nursing service staffing and quality of nursing care. *Nursing Research*, 1960, *9* (3), 149–154.

Source of Information:
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Instrument Copyright: None.

Safford, Beverly J., Schlotfeldt, Rozella M., and Bolcer, Eileen

QUALITY OF NURSING CARE QUESTIONNAIRE--PATIENT

Please place an X in the space to the right below the word that best describes how you feel about each question at the left. If you have any additional remarks you would like to make, please use the space "Additional Comments" which is provided at the end of the questionnaire.

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
A. Did your nurses do little things like changing your position, fluffing your pillow, or smoothing your sheets to make you feel comfortable?					
Did your nurses carry out treatments and medications on time?					
If you needed medicine for pain, did you receive it promptly?					
Did your nurses answer your light promptly?					
Did your nurses keep your bell cord within easy reach?					
Did your nurses know how to use the equipment needed for your care?					
Were you covered with a cotton blanket during your bath?					
Did your nurses bathe you thoroughly or help you with your bath as needed?					
Did your nurses take care of your needs for cleaning your teeth?					
Did your nurses help you in getting in and out of bed?					
Were your nurses gentle in caring for you?					
Did your nurses seem to know what you needed before you had to ask for it?					
Did your nurses seem to understand how you felt?					
B. Did your nurses appear to enjoy caring for you?					

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
Did all the nurses caring for you seem to be informed as to your needs?					
Did there appear to be a good feeling among the nurses who cared for you?					
Did you feel that your nurses were interested in you and your welfare?					
When you were fearful, did your nurses try to relieve your fears?					
Did your nurse explain what would happen to you (treatments, hospital routine, tests)?					
Did your nurses treat you with respect?					
Were your nurses able to answer your questions?					
Did you feel confidence in your nurses?					
Did your nurses attend to your religious needs?					
Were your nurses patient and understanding?					
Were your nurses friendly?					
Did your nurses protect your privacy?					
Did your nurses keep your room neat?					
Did your nurses seem to have time to take care of you?					
Was your family kept well-informed?					
Did you enjoy your nursing care?					
C. Did your nurses seem to understand your physician's plan for your care?					
D. Did your nurses take time to make sure you understood what they taught you?					
E. Were your nurses calm?					
Were your nurses considerate in the way they talked to you?					

	ALWAYS	USUALLY	SOMETIMES	SELDOM	NEVER
F. Did you feel that the nurses on the unit were working together as a team for your recovery?					
Did your nurses seem to know what their jobs were?					
Did you feel that you received enough attention from an R.N.?					
Did your nurses and doctors appear to have the supplies and equipment they needed to give you good care?					

	YES	PARTIALLY	NO
Did your nurses teach you how to care for yourself?			
Did your nurses try to make you feel at home when you were admitted to the hospital?			
Did your nurses help you to understand your illness?			
Did your nurses explain to you how to care for yourself at home?			
Did your nurses explain to your family what your needs will be at home?			

Please indicate which term best describes the nursing care you have received in the past seven days:

Excellent	Very Good	Satisfactory	Only Fair	Unsatisfactory
______	______	______	______	______

Additional Comments:

Title: PATIENT PERCEPTIONS OF HEALTH SERVICES

Author: Triplett, June L.

Variables: Perceptions of health services as indicated by patients' perceptions of nurses, physicians, social isolation, self-esteem, and interactional threats—past and present—are the variables measured by the instrument.

Description:

Nature and Content: This is a 94-item questionnaire to be administered by interview and observation. It was designed to be read to low-income women during home visits by public health nurses. The sections and the number of items in each are as follows: Nurse Disparity (9 items), Medical Disparity (9 items), Perceived Threat–Past Experience (8 items), Social Isolation (7 items), Threat (13 items), Self-Esteem (15 items), Perceptions of Others (6 items).

There are 21 items of demographic data and 6 "observation" items, e.g., condition of home, condition of furnishings, personal appearance of respondent, etc. These last six items are to be completed by the nurse-interviewer.

Many of the questions have multiple parts, and response formats vary according to the type of question, i.e., some questions have multiple choice answers; some questions are answered by means of a 4-point Likert-type scale; some questions are open-ended.

Administration and Scoring: The items and the response choices are to be read to the subject during a home visit by the public health nurse-interviewer. However, it would appear that the questionnaire could be adapted for self-administration. The author reported that the interviewer "needed familiarity with the instrument, patience, tolerance, and the ability to cope with interruptions, distractions, and digressions within the home." The average length of time required for completing the interview is 1 hour.

The instrument is coded for machine scoring as well as hand scoring; the responses are also coded for computerization. Possible responses are assigned scores so that for some sections a low score indicates a favorable perception; in other sections a high score indicates a favorable perception. No other scoring information was provided.

Development:

Rationale: The author stated that the instrument was not derived from any specific theory.

Source of Items: The items which measure self-esteem were adopted from Rosenberg (1965).

Procedure for Development: No information was provided other than the fact that a pretest had been conducted.

Reliability and Validity: No reliability coefficient was determined on the pretest or the author's study itself.

The author reported that the instrument has face validity.

Use in Research: No information was provided.

Comments: The author reported that some subjects had difficulty with items requiring introspection. This instrument attempts to measure several important variables; a narrowing of the scope of the instrument would probably mean more reliable measurement of the remaining variables. Many of the items should be revised and refined. For example, in items 1 through 9, five sentences begin with the word "nurses" and four with the pronoun "they"; in items 12 through 20, three items begin with the word "doctors," five with the pronoun "they," and one with "you." These items should be restated so that the wording is parallel.

The response choices need revision, in that those provided—most, lot, some, and seldom—are inconsistent with each other and the directions provided.

References:

Rosenberg, Morris. *Society and the adolescent self-image.* Princeton, New Jersey: Princeton University Press, 1965.

Source of Information:

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Instrument Copyright: None.

Triplett, June L.

PATIENT PERCEPTIONS OF HEALTH SERVICES

As I read the following sentences, I'd like you to think about the nurses who have visited you recently and then have you tell me whether each sentence is almost always true, true a lot of the time, some of the time, or hardly ever true.

	Most	Lot	Some	Seldom
1. Nurses really seem to care about what you think and want.	1	2	3	4
2. Nurses use words you don't understand.	4	3	2	1
3. They expect you to do things you don't know how to do.	4	3	2	1
4. You can depend on the nurse to notice the good things you do.	1	2	3	4
5. Nurses expect you to do things you don't think are important.	4	3	2	1
6. They think they have all the right answers to your problems.	4	3	2	1
7. Nurses let you decide what health actions are important to you.	1	2	3	4
8. They find out what you have already tried before giving you new ideas.	1	2	3	4
9. Nurses make it easy for you to ask questions about things you don't understand.	1	2	3	4

10 - 11 TOTAL NURSE DISPARITY SCORE

Now let's do the same thing except that the statements will be about the doctors you have seen at the well-child clinics.

		Most	Lot	Some	Seldom
12.	Doctors really seem to care about what you think and want.	1	2	3	4
13.	They help you feel you can learn new ways of doing things.	1	2	3	4
14.	Doctors use words you don't understand.	4	3	2	1
15.	They let you decide what health actions are important to you.	1	2	3	4
16.	You can depend on the doctor to notice the good things you do.	1	2	3	4
17.	They think they have all the right answers to your problems.	4	3	2	1
18.	They tell you to do things you can't afford to do.	4	3	2	1
19.	Doctors make it easy for you to ask questions about things you don't understand.	1	2	3	4
20.	They expect you to do things you don't know how to do.	4	3	2	1

21 - 22. TOTAL MEDICAL DISPARITY SCORE _____

nurse disparity (page 1) _____

23 - 24. TOTAL DISPARITY SCORE _____

25. When it comes to preventing accidents or illnesses, would you say that you worry a lot about what is going to happen next month or next year, or do you sort of take things as they come?

a. _____(1) worry
b. _____(2) take things as they come

26. Which do you think is more important in determining what will happen in the future?

a. _____(1) your own actions
b. _____(2) chance or luck

27. When you think about all the people whose jobs are to help or protect you and your family such as welfare workers, police, teachers, probation officers, doctors or nurses, have you generally

a. _____(2) expected them to cause you trouble until they showed you otherwise
b. _____(1) expected them to be helpful until they showed you otherwise

28. When you have talked with people in these kinds of jobs, have they usually

a. _____(2) made you feel that your opinions and ideas weren't worth much
b. _____(1) made you feel that your ideas and opinions were important

29. Have these people

a. _____(1) made you feel it was OK to ask for help when you really needed it
b. _____(2) made you feel like you were no good when you asked for help

30. Some mothers tell me that they don't shop in the good department stores because the clerks have been rude to them. How often has this happened to you?

a. _____(3) frequently
b. _____(2) occasionally
c. _____(1) hardly ever or never

31. Some people say that most people can be trusted. Others say you can't be too careful in your dealings with people. How do you feel about it?

a. _____(1) most people can be trusted
b. _____(2) you can't be too careful

32. Would you agree or disagree that if you don't watch yourself, people will take advantage of you?

a. _____(2) agree
b. _____(1) disagree

33 - 34. TOTAL PERCEIVED THREAT (past experience) _____
items 27 through 32

35. Some mothers say they spend so much time at home doing housework and looking after the children that they hardly ever know what is happening in the neighborhood. How often do you feel this way?

a. _____(4) most of the time
b. _____(3) about half the time
c. _____(2) not very often
d. _____(1) hardly ever or never

36. About how often do you get away from the house (apartment)?

a. _____(1) several times a day
b. _____(2) at least once a day
c. _____(3) 3 - 5 times a week
d. _____(4) once or twice a week
e. _____(5) less often

37. About how often do friends or relatives visit you?

a. _____(1) several times a day
b. _____(2) at least once a day
c. _____(3) 3 to 5 times a week
d. _____(4) once or twice a week
e. _____(5) less often

38. How many groups do you belong to which meet regularly such as union, veteran's organizations, church, clubs, etc.? (Specify)

a. _____(4) none
b. _____(3) one
c. _____(2) two or three
d. _____(1) more than 3

39. About how often do you attend their meetings?

a. _____(1) most of the time
b. _____(2) about half the time
c. _____(3) less than half
d. _____(4) rarely or never

40. If you added up all the meetings you attend, about how many would this be each month?

Group Frequency

a. _____(3) less than one
b. _____(2) 1 - 3
c. _____(1) more than 3

41. Would you say that you tend to be a lonely person?

a. ______(2) fairly lonely
b. ______(3) very lonely
c. ______(1) not lonely

42 - 43. TOTAL SCORE ON SOCIAL ISOLATION (35 - 41) ______

44. Do you think that most people know the kind of person you really are, or do you feel that most people do not know what really goes on underneath?

a. ______(1) people know
b. ______(2) people don't know

45. What kinds of things do the nurses do or say which make you feel like they really care about you and your family?

46. What kinds of things do they do or say which make you think they are just doing a job and don't really care about you and your family?

All of us are uneasy about doing some things even when we know they are important because even the thought of doing them makes us feel afraid or uncomfortable. I'll read what some mothers have told me about their experiences in getting health care for their children - things like getting shots and check-ups by the doctor and dentist - and then have you tell me how often you feel uneasy or afraid. The choices are almost always afraid, frequently, sometimes or hardly ever. Do you feel afraid

	4 Most	3 Freq.	2 Some	1 Rare
47. when you don't know how to act in a new place	____	____	____	____
48. when you don't have clothes you think are good enough.	____	____	____	____
49. when you think people will use words you don't understand.	____	____	____	____
50. when you think you won't understand the instructions given you.	____	____	____	____
51. when you think people might be rude to you.	____	____	____	____
52. when there is no one around that you know.	____	____	____	____
53. when you don't know the right words to use in asking questions.	____	____	____	____

	4 Most	3 Freq.	2 Some	1 Rare
54. when you expect people not to pay any attention to you.	_____	_____	_____	_____
55. when you feel pushed to do some health action you don't think is important or possible.	_____	_____	_____	_____

56. Everyone has these feelings of fear some of the time. Would you say you were afraid or uneasy

a. _____(4) more often than most of your friends
b. _____(3) about as often
c. _____(2) less often
d. _____(1) hardly ever afraid

57 - 58. TOTAL THREAT SCORE (47 - 56) _____

59. If you offer your opinion on some important health topic and someone laughed at you for it, how would this make you feel?
a. _____(3) deeply hurt and disturbed
b. _____(2) somewhat hurt and disturbed
c. _____(1) wouldn't bother me very much

60. When health problems are discussed, do you often prefer to say nothing at all than to say something that will make a bad impression?
a. _____(1) not afraid of making a bad impression
b. _____(2) prefer to say nothing

6 . When health problems are discussed, would you rather say nothing at all then to say something that would make people angry with you?

a. _____(1) doesn't matter if people get angry
b. _____(2) would say nothing

62 - 63. INTERPERSONAL THREAT SCORE (59 - 61) _____

64 - 65. TOTAL THREAT SCORE (33 - 34, 57 - 58, 62 - 63) _____

Some people say that the way people feel about themselves makes a difference in how they use health services. For this reason, I'd like to ask you to listen to some sentences that people use in talking about themselves and have you tell me whether you would strongly agree, agree, disagree or strongly disagree with each of them in thinking about yourself.

	SA	A	D	SD
81. On the whole, I am satisfied with myself.	_____	_____	_____	_____
82. At times I think I am no good at all.	_____	_____	_____	_____
83. I feel that I have a number of good qualities.	_____	_____	_____	_____
84. I am able to do things as well as most other people.	_____	_____	_____	_____

85. I feel I do not have much to be proud of. _____ _____ _____ _____
86. I certainly feel useless at times. _____ _____ _____ _____
87. I feel that I am a person of worth, at least on an equal plane with others. _____ _____ _____ _____

SA A D SD

88. I wish I could have more respect for myself. _____ _____ _____ _____
B9. All in all, I am inclined to feel that I'm a failure. _____ _____ _____ _____
B10. I take a positive attitude toward myself. _____ _____ _____ _____

SUB-TOTALS - SELF ESTEEM

B 11. If items 3 and 7 agree and 9 disagree, score 2
If 1 of 3 differs from above, score 2
If 2 of 3 or all differ 1 _____

B 12. If item 4 agree and 5 disagree, score 2
Any difference 1 _____

B 13. If agree on item 1 2
Disagree 1 _____

B 14. Item 8 disagree 2
agree 1 _____

B 15. Items 2 and 6 both disagree 2
Any difference 1 _____

B 16 - 17. SELF-ESTEEM SCORE _____

B 18. What do the nurse and doctors do or say that make you feel good about yourself as a mother or as a person?

B 19. What do they do or say that make you think less of yourself as a person or as a mother?

B 20. Suppose a new couple has just moved into your neighborhood. They are very young and have twins 3 months old. The public health nurse wants to find someone in the neighborhood to give this mother good suggestions about caring for her babies. Compared to the other mothers the nurse knows in your area, do you think the nurse would

a. _____(4) think of you as among the most able to help
b. _____(3) think of you as rather able
c. _____(2) think of you as not very able
d. _____(1) probably not think of you at all

B 21. If the nurses at the clinic wanted some mothers to help make toys for the clinic waiting room, how much of a chance do you think you would have of being chosen?

a. _____(4) a very good chance
b. _____(3) a good chance
c. _____(2) not much of a chance
d. _____(1) no chance at all

B 22. If you were to make some suggestions to make the clinic run better, do you think the nurses would

a. _____(1) not consider them at all
b. _____(2) give them very little consideration
c. _____(3) give them some consideration
d. _____(4) give them a great deal of consideration

B 23. Suppose the well-child clinic decided to select the best mother of the year. Compared to all the other mothers you know who take children to the clinic, where do you think the nurses would rate you in such a contest?

a. _____(4) close to the top
b. _____(3) toward the top
c. _____(2) toward the bottom
d. _____(1) close to the bottom

B 24 - 25. PERCEPTIONS OF OTHERS' PERCEPTIONS OF THEM - TOTAL (20 - 23) _____

B 26. If you suddenly found yourself getting twice as much money each month as you now get, would you make any changes in how you obtain health care for yourself and your family? (Probe).

Titles: NURSING ACTIVITIES CHECKLIST FOR PATIENTS. NURSING ACTIVITIES CHECKLIST FOR NURSES. *Note:* These two instruments were developed to be used jointly. Only the one designed for patients is included here.

Author: White, Marguerite B.

Variables: The instruments were designed to determine the relative importance of selected nursing activities to patients and to nurses. Selected nursing activities are operationally defined by the 50 items included on the checklists.

Description:

Nature and Content: Each of these instruments is a 50-item self-checklist. The contents, format, and response categories are exactly the same with the exception of changes in the pronouns used on the forms, i.e., the one designed for patients uses the pronouns I, me, and my; the one designed for nurses used he, him, and his.

The nursing activities, though not so identified on the instrument per se, can be categorized into four broad groups:

1. physical care in response to physiological needs (items pertaining to cleanliness and physical comfort, rest and sleep, exercise and position, elimination, foods and fluids, and environment);
2. psychological aspects of nursing care (supportive emotional care, spiritual care, and diversional care);
3. implementation of medical care (observing, reporting, and carrying out doctors' orders;
4. preparation for discharge (teaching and planning for continuity of care).

Response choices, to be indicated by placing a check in the appropriate box following each item, are in terms of the importance of a specific activity to the respondent—extreme importance, very important, medium importance, slight importance, no importance, does not apply.

Examples of the activities are: "Provide a clean, comfortable bed"; "Give prescribed medications on time"; "Plan some diversion on recreation for [the patient]"; "Talk with the family about the patient's illness and the care needed at home."

Administration and Scoring: These are self-administered questionnaires and no specific provisions or skills are necessary for their completion. Introductory paragraphs, which provide a frame of reference, and directions precede the actual checklist items on each form.

There was no estimate of the time required to complete the instrument.

Each point on the scale is assigned a numerical value ranging from 4 (extreme importance) to 0 (no importance or does not apply). Other scoring procedures will depend upon the needs and purposes of the user.

Development:

Rationale: Hospitalized adults and professional nurses charged with their care may differ as to the importance of selected nursing activities. A patient's perceptions concerning what is important for his welfare influences his attitude toward the nursing care received and the value derived from it. So, too, a nurse's actions are governed by her perceptions of a patient's needs based upon her nursing knowledge and experience. A successful nursing care plan should, in so far as possible, develop goals which are a synthesis of the patient's personal health care desires and the nurse's professional expertise.

Source of Items: Items were based upon a review of literature, statements of nursing leaders and professional organizations, nursing textbooks, nursing function studies, research reports, interviews with patients, interviews with nursing personnel, and the author's professional experience.

Procedure for Development: From the above sources, four broad categories of nursing activities were developed. Under each category, a list of simple, concise statements covering a wide range of activities was prepared. The list of 74 items was submitted to graduate nurses (doctoral candidates, nursing school faculty, nursing practitioners) and former patients for editing and suggestions for additional activities. As a result the list of items was expanded to 95.

Selection of items for the revised list was based upon two criteria: the completed instrument should contain a sufficient number of items to represent each category adequately, and the instrument should be short enough to minimize fatigue and maintain the interest of the respondents. Fifty-six of the 95 statements were selected as being the most significant and the most appropriate.

First drafts of the instruments were administered to three hospital staff nurses and three hospitalized patients in order to test the instrument for clarity of instructions and items, length of time for completion, and overall reaction to the instrument. Following recommended changes, revised instruments were submitted to 12 graduate nurses selected on the basis of clinical nursing competency. Following their review, the instructions for the instruments were revised, a few items were added, several items were deleted, and others were clarified. This revision resulted in the final 50 items of the instrument.

Reliability and Validity: No information dealing directly with the reliability of the instruments was provided.

Content validity was established by the steps described under *Procedure for Development* above.

Use in Research: The development and use of these instruments are described in White's doctoral dissertation and the resulting publication referenced below. These instruments were also used by Yang (1974).

Comments: This type of measure administered to both patients and nurses has potential as a tool for effecting greater congruency of nursing role expectations for the public and the nursing profession. The reliability of the instrument needs to be established, and an item analysis might indicate that some of the items cculd be eliminated.

References:

White, M. B. *Importance of selected nursing activities.* Unpublished doctoral dissertation, Teachers College, Columbia University, 1970.

______. Importance of selected nursing activities. *Nursing Research*, 1972, *21* (1), 4–14.

Yang, Jung H. C. *Identification of the areas and degrees of importance on fifty selected nursing activities as viewed by the nurse and patient.* Unpublished master's thesis, University of Iowa, 1974.

Source of Information:

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Instrument Copyright:

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White, Marguerite B.

NURSING ACTIVITIES CHECKLIST FOR PATIENTS

The statements below describe some activities a member of the nursing staff might perform for a patient. Perhaps some of these were done for you and some were not done. You probably consider some of them more important than others. You are being asked to rate each statement, regardless of whether or not it was done, according to its importance to you, ranging from "extreme importance" to "no importance" or "does not apply." Please read over the entire list.

In thinking about your own care during the past few days, please indicate the importance of each item by placing a check in the appropriate box. If the statement describes an activity which you can take care of without nursing assistance or which does not apply to you, check the last column.

Nursing Activity	Extreme Importance	Very Important	Medium Importance	Slight Importance	No Importance	Does Not Apply
1. Take my temperature and pulse.						
2. Give me (or assist me with) a daily bath.						
3. Assist with the care of my mouth and teeth.						
4. Provide me with a clean, comfortable bed.						
5. Help me with grooming, such as care of nails, hair and/or shaving.						
6. Be sure that I have necessary equipment—glass, towel, soap, blanket, etc.						
7. Provide privacy during my bath and my treatments.						
8. Take special care of my skin so it does not become sore.						
9. See that my unit is kept clean and tidy.						
10. Allow me to make decisions about my own care.						
11. Help me to assume a comfortable or appropriate position.						
12. Notice when I have pain and give me medication if ordered.						
13. Change my position frequently.						
14. Make me comfortable by rubbing my back.						
15. Observe the effect of treatments ordered by the physician.						

Nursing Activity	Extreme Importance	Very Important	Medium Importance	Slight Importance	No Importance	Does Not Apply
16. Consider my personal preferences when caring for me.						
17. See that I have a bed pan or urinal when I need it.						
18. Help me maintain or restore normal elimination.						
19. Check on bowel functioning and report problems to the doctor.						
20. Help me in and out of bed.						
21. Help me get necessary exercise while I am in the hospital.						
22. Discuss with me the amount and type of activity I should have at home.						
23. Encourage me to take more responsibility for my own care while in the hospital.						
24. Give prescribed medications on time.						
25. Teach me about the medications I will be taking at home.						
26. Plan my care so that I will be able to rest while in the hospital.						
27. Provide a comfortable, pleasant environment (proper temperature, free from odors and disturbing noises.						
28. Relieve my anxiety by explaining reasons for my symptoms.						
29. Make me feel that you are happy to care for me.						
30. Arrange for my priest, minister or rabbi to visit me.						
31. Make it possible for me to observe my religious practices in the hospital.						
32. Assist me with my meals.						
33. See that I have food and/or fluid between meals.						
34. See that my food is served promptly.						

Nursing Activity	Extreme Importance	Very Important	Medium Importance	Slight Importance	No Importance	Does Not Apply
35. Ask the dietitian to serve me soft foods that I am able to chew.						
36. Help me understand how to plan the diet I will need at home.						
37. Be sure I have a copy of my diet.						
38. Talk with me about topics unrelated to my illness. such as news, hobbies, other interests.						
39. Plan some diversion or recreation for me.						
40. Take time to talk with my family and answer their questions.						
41. Help me make arrangements for my care at home.						
42. Notice changes in my condition and report them.						
43. Tell my doctor that I am worried about my condition.						
44. Be understanding when I am irritable and demanding.						
45. Take time to listen to me.						
46. Carry out the doctor's orders.						
47. Explain about diagnostic tests ahead of time so I will know what to expect.						
48. Give me pamphlets to read and/or talk with me about my illness in order to help me understand how to care for myself.						
49. Arrange for a public health nurse to visit me at home.						
50. Talk with my family about my illness and the care I will need at home.						

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Title: APPPOINTMENT-REQUIRED CLINIC AND NO-APPOINTMENT-REQUIRED CLINIC SEMANTIC DIFFERENTIAL

Authors: Wyatt, Janet S., and Rozell, Billie

Variable: Patients' attitudes toward clinics: "appointment-required" clinics and "no-appointment-required" clinics is the variable being assessed.

Description:

Nature and Content: To rate client attitudes toward two types of clinics, appointment required and no appointment required, the semantic differential test was used. A set of nine positive evaluative adjectives and their corresponding negative evaluative adjectives was identified. The word "good" is an example of a positive evaluative adjective; the corresponding negative evaluative adjective is "bad."

This self-administered instrument consists of three parts: a set of nine pairs of evaluative adjectives to be rated relative to how those adjectives apply, respectively, to the words "clinic," "appointment required," and "no appointment required." Each pair of adjectives is rated on a 5-point scale.

Administration and Scoring: The instrument is self-administered and no special provisions are required for administration other than the investigator must make the directions for completion very clear. Directions for completion precede the items on this scale.

Osgood and his associates (1957) have assigned a numerical weight to each of the nine pairs of evaluative adjectives; these numerical weights are to be used in scoring responses on this instrument.

Development:

Rationale: Osgood and his associates originated the semantic differential technique as one method for measuring attitudes.

Source of Items: The semantic differential test as designed by Osgood incorporates adjectives with a "potency" factor and adjectives with an "evaluative" factor. Only evaluative adjectives were used in this study, since this dimension displays "reasonable face validity" as a measure of attitude (Osgood, 1957).

Procedure for Development: No information was provided.

Reliability and Validity: No information concerning reliability was provided. The authors stated that the instrument has face validity (Wyatt, 1974).

Use in Research: Wyatt and Rozell (1974) developed and used the instrument in a group research project conducted as partial fulfillment of requirements for a graduate degree at the University of Alabama.

Comments: Anyone considering using the semantic differential technique should consult the references cited below and should keep in mind that attitudes toward clinics which do or do not require appointments cannot be measured in isolation. Any potential user must be aware of other factors which influence clients' attitudes toward clinics, e.g., quality of care received, attitudes of the health care personnel toward clients, etc.

References:

Osgood, Charles, Suci, George, and Tannenbaum, Percy. *The measurement of meaning.* Urbana, Illinois: University of Illinois Press, 1957.

Snider, James G., and Osgood, Charles. *Semantic differential technique.* Chicago: Aldine Publishing Co., 1969.

Wyatt, Janet S., and Rozell, Billie. *A comparison of walk-in and appointment visits in a nursing clinic with respect to client attitudes and return rates.* Unpublished research report, School of Nursing, University of Alabama, Birmingham, 1974.

Source of Information:

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Instrument Copyright: None.

Wyatt, Janet S., and Rozell, Billie

APPOINTMENT REQUIRED CLINIC AND NO APPOINTMENT REQUIRED CLINIC SEMANTIC DIFFERENTIAL

Thank you for filling out these pages. No names will be put on these pages so no one will know how you mark.

First look at the big word in capital letters at the top of each page. These main words are:
CLINIC
APPOINTMENT REQUIRED
NO APPOINTMENT REQUIRED

Next, look at the two lists of words below with 5 blank spaces in between each word. All of these words are opposites of each other.

Now think about how you feel about the main word at the top of the page. Then look at the first word on the left side of the page and compare it to the first word on the right.

If the word on the left best fits your feeling about the main word at the top of the page, mark an X in the space closest to that word, space a.

Example:
left __X__ _____ _____ _____ _____ right
a b c d e

If the word on the right best fits your feeling for the main word mark an X in the space closest to that word, space e.

Example:
left _____ _____ _____ _____ __X__ right
a b c d e

If the word on the left and the word on the right seem to fit your feeling about the main word, mark an X in the middle space, space c.

Example:
left _____ _____ __X__ _____ _____ right
a b c d e

If the word on the left only somewhat fits your feeling for the main word, mark an X in space b.

Example:
left _____ __X__ _____ _____ _____ right
a b c d e

If the word on the right only somewhat fits your feeling for the main word, mark an X in space d.

Example:

left	______	______	______	X	______	right
	a	b	c	d	e	

Please be sure to put a mark, X, in only one of the 5 spaces between each of the two lists of words.

Do you have any questions?

Clinic

good	______ a	______ b	______ c	______ d	______ e	bad
high	______ a	______ b	______ c	______ d	______ e	low
bright	______ a	______ b	______ c	______ d	______ e	dark
nice	______ a	______ b	______ c	______ d	______ e	awful
happy	______ a	______ b	______ c	______ d	______ e	sad
pleasant	______ a	______ b	______ c	______ d	______ e	unpleasant
fair	______ a	______ b	______ c	______ d	______ e	unfair
valuable	______ a	______ b	______ c	______ d	______ e	worthless
rich	______ a	______ b	______ c	______ d	______ e	poor

Appointment Required

good	___ a	___ b	___ c	___ d	___ e	bad
high	___ a	___ b	___ c	___ d	___ e	low
bright	___ a	___ b	___ c	___ d	___ e	dark
nice	___ a	___ b	___ c	___ d	___ e	awful
happy	___ a	___ b	___ c	___ d	___ e	sad
pleasant	___ a	___ b	___ c	___ d	___ e	unpleasant
fair	___ a	___ b	___ c	___ d	___ e	unfair
valuable	___ a	___ b	___ c	___ d	___ e	worthless
rich	___ a	___ b	___ c	___ d	___ e	poor

No Appointment Required

good	a	b	c	d	e	bad
high	a	b	c	d	e	low
bright	a	b	c	d	e	dark
nice	a	b	c	d	e	awful
happy	a	b	c	d	e	sad
pleasant	a	b	c	d	e	unpleasant
fair	a	b	c	d	e	unfair
valuable	a	b	c	d	e	worthless
rich	a	b	c	d	e	poor

Client and Significant Others Interaction

Title: NEONATAL PERCEPTION INVENTORIES (NPI)

Author: Broussard, Elsie R.

Variable: The primipara's perception of her infant is the variable being measured.

Description:

Nature and Content: There are two distinct inventories: (1) the Neonatal Perception Inventory I, administered during the immediate postpartum hospital stay (days 1–4); and (2) the Neonatal Perception Inventory II, administered at approximately 1 month postpartum (4–6 weeks).

Each inventory consists of two forms designed to be used together, i.e., the Average Baby and Your Baby forms. Each of the forms consists of six single-item scales. The items and response formats of the forms are identical.

Administration and Scoring: The Neonatal Perception Inventories are easily and quickly administered. The wording varies slightly to take into account the age of the infant at the time of administration. The mother of the 1-month-old is handed the Average Baby form and asked to check the blanks she thinks best describe the average baby. The investigator waits until the mother has completed that inventory, retrieves it from the mother, then gives her the Your Baby form stating, "You have had a chance to live with your baby for about a month now. Please check the blank you think best describes your baby." (Her verbal instructions differ slightly from those used at time I when the mother is asked to rate the baby according to what she *thinks* he *will* be like.) The author recommends that the investigator remain with the mother during the entire administration procedure.

For scoring, values of 1 to 5 are assigned to each of the scales for each of the inventories. The blank "none" is assigned a value of 1 and "a great deal" has a value of 5. The lower values on the scale represent the more desirable behavior. A total score is obtained for the Average Baby form and a total score is obtained for the Your Baby form. The total score of the Your Baby form is then subtracted from that of the Average Baby form; the discrepancy constitutes the Neonatal Perception Inventories score.

Infants rated by their mothers as better than average (plus score on the Neonatal Perception Inventory II) are considered at low risk; those infants not rated better than average (minus or 0 score) are considered at high risk for subsequent development of emotional difficulty.

The mother's perception of her infant as measured by the Neonatal Perception Inventories on the first or second postpartum day did not prove to be related to the subsequent development of the child at age 4½ or at 10 or 11 years.

When both the ratings attained at the immediate postpartum period (NPI I) and 1 month of age (NPI II) are used as a predictive instrument, their combined predictive ability is greater than when NPI II is used alone (Broussard, 1977).

Development:

Rationale: Many researchers have felt that the time just before and following birth is significant in setting patterns of interaction between mother and child which may continue long afterward (Escalona, 1949; Sontag, 1941; Josselyn, 1948). When a woman becomes a mother, she has certain expectations as to what kind of mother she will be and what kind of child she will have. After delivery, the mother-child relationship develops into a cyclical system. The way the mother relates to the child will be modified by her perception of the infant's appearance and behavior; the infant's behavior will, in turn, be affected by her handling and reactions to the infant (Broussard, 1964). The implications of this relationship led the author to focus on mothers' perceptions of their infants and the subsequent development of the inventories.

Source of Items: The items were based upon the author's past clinical experience with the concerns young mothers expressed about their babies.

Procedure for Development: No information was provided.

Reliability and Validity: No reliability information was provided.

The inventories have shown construct and criterion validity. In 1963 the inventories were administered to 318 primiparae on the first or second postpartum day and again when the infants were 1 month old. All infants were full-term, healthy, first-born children. One hundred twenty of the children were evaluated at age 4½ years by two child psychiatrists without knowledge of their classification (high or low risk) on the inventories. A significant (<0.001) relationship was found between prediction (using the inventories) and outcome (psychiatric evaluation) (Broussard and Hartner, 1970).

One hundred four of the children were evaluated at age 10 to 11 years by three psychiatrists. Again the relationship was significant (<0.02) between prediction and outcome (Broussard, 1977).

In 1973 the inventories were used to screen 281 full-term, healthy first-borns. Evaluations at 1 year and at 2½ years for 69 of these children indicated statistically differences between low and high risk groups ($p < 0.05$) on clinical clusters which measured such items as attachment, confidence, coping, and frustration tolerance (Broussard, 1976).

Use in Research: This instrument, designed to measure maternal perception, can serve as a method for early identification of potential developmental problems and the basis for planning programs aimed at early intervention. It has been used in two large-scale research projects (Broussard, 1964, 1976, 1977) (Broussard and Hartner, 1970).

Comments: The procedure for administration and scoring are simple and straightforward. The instrument is brief and, consequently, easy to use, yet shows significant predictive validity.

References:

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Source of Information:

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Broussard, Elsie R.

NEONATAL PERCEPTION INVENTORIES (NPI)

AVERAGE BABY

Although this is your first baby, you probably have some ideas of what most little babies are like. Please check the blank you think best describes the AVERAGE baby.

How much crying do you think the average baby does?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much trouble do you think the average baby has in feeding?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much spitting up or vomiting do you think the average baby does?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much difficulty do you think the average baby has in sleeping?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much difficulty does the average baby have with bowel movements?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much trouble do you think the average baby has in settling down to a predictable pattern of eating and sleeping?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

YOUR BABY

While it is not possible to know for certain what your baby will be like, you probably have some ideas of what your baby will be like. Please check the blank that you *think* best describes what *your* baby will be like.

How much crying do you think your baby will do?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much trouble do you think your baby will have feeding?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much spitting up or vomiting do you think your baby will do?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much difficulty do you think your baby will have sleeping?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much difficulty do you expect your baby to have with bowel movements?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

How much trouble do you think that your baby will have settling down to a predictable pattern of eating and sleeping?

___ a great deal   ___ a good bit   ___ moderate amount   ___ very little   ___ none

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Title: HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT (HOME)

Author: Caldwell, Bettye M.

Variables: This instrument is designed to measure certain aspects of the support available in the home environment of a child. Specifically, it provides measures of: (1) emotional and verbal responsibility of mothers, (2) avoidance of restriction and punishment, (3) organization of physical and temporal environment, (4) provision of appropriate play materials, (5) maternal involvement with child, and (6) opportunities for variety in daily routine. In addition, it provides for a total score which alleges to provide an assessment of the total quality of the environment.

Description:

Nature and Content: This instrument is composed of 45 "Yes" or "No" items grouped into the six categories named above under *Variables.* One example from each category is as follows:

1. Mother responds to child's vocalizations with a vocal or verbal response.
2. Mother does not scold or derogate child during visit.
3. Child gets out of house at least four times a week.
4. Mother provides toys or interesting activities for child during interviews.
5. Mother tends to keep child within visual range and to look at him(her) often.
6. Father provides some caregiving every day.

The information for each item is derived from direct observation or questions to the parent. The manual provides instructions for conducting the home interview, making the necessary observations, and scoring the individual items.

Administration and Scoring: Preliminary study of the instruction manual for the inventory is required. The interviewer must make appointments for interviews with attention to requirements that the child is awake and can be observed in his(her) normal routine for that time of day.

Following a warmup period, the interview involves some observations of the home environment and mother-child interactions.

Each of the 45 items is checked either "Yes" or "No"; a score of 1 is assigned for "Yes," and a score of 0 is assigned for "No." Subscores are obtained by summing the item scores in the six categories. The total score is the sum of the subscores; the maximum total score is 45. The higher the score, the better the home environment for child learning and behavior development. However, the manual cautions the interviewer against thinking in terms of the respondent's "passing" or "failing" items or the test as a whole.

A table is also provided whereby raw subscores and the total score can be transformed into stanines based upon a standardization sample of 124 home visits.

Development:

Rationale: Caldwell (1968) states:

> The primary objective that guided the development of this Inventory was the desire to assemble a set of items to assess those somewhat intangible qualities of person-person and person-object interaction which collectively comprise the infant's learning environment. In the past the assumption has been made that the generic term 'social class' adequately encompassed these quantitative and qualitative characteristics. The development of this Inventory represents a conviction that such a gross structural designation as social class is insensitive to the cumulative transactions that occur daily between the infant and his environment and that an attempt to describe and measure these transactions will not only provide a more accurate description of the learning environment but will in addition help to pinpoint areas in which intervention is needed.

Source of Items: Selection of items was guided by empirical evidence of the importance of certain types of experience for nourishing the behavioral development of the child. Included were such things as the importance of the opportunity to form a basic attachment to a mother or mother substitute; an emotional climate characterized by mutual pleasure, sensitive need-gratification, and minimization of restriction and punishment; a physical environment that is both stimulating and responsive, offering a variety of modulated sensory experience; freedom to explore and master the environment; a daily schedule that is orderly and predictable; and an opportunity to assimilate and interpret experience within a consistent cultural milieu. Not represented in the inventory are indices of health and nutritional status. Adequacy of support in these crucial areas is perhaps less reliably assessed by home observation than by other procedures (Caldwell, 1968).

Procedure for Development: The original intention was that all items should be based on direct observation of the interaction between the caretaker (usually the mother) and the child. A large pool of items was generated, all of which required actual observation of mother-child behavior. However, a conceptual examination of the items suggested that many important areas of infant experience were unfortunately excluded with this restriction on the type of items. Accordingly, with succeeding versions of the inventory (the present is the fourth revision), items requiring interview data were added. Such items comprise about one-third of the total number. In statistical analyses of previous versions of the inventory, interview items that were psychometrically superior to observation items were given priority over observation items. However, when shortening the inventory for this version, priority was always given to observation whenever an observationally based item had statistical attributes similar to one derived from the interview.

The present version of the inventory was based on a factor analysis of a previously standardized, 72-item version. Items are grouped within categories according to factor loadings, and the order of presentation of the different categories is based on the relative importance of each category within the total inventory. Subheadings used for grouping items are derived from a study of item content in the different factors (Caldwell, 1968).

A stanine expectancy table was established for the 6-factor subscores and the total scores based upon a sample of 124 home visits.

Reliability and Validity: Using the Kuder-Richardson Formula 20, the internal consistency of the instrument was 0.89 and that of the subscales ranged from 0.44 to 0.89 (N=176).

Content validity was established through the steps described above under *Source of Items* and *Procedure for Development.* Validity is also indicated by the fact that total HOME scores correlated at moderately high levels from 0.50 to 0.70 with Binet scores obtained a year or more later.

Use in Research: The home assessments were an essential part of the long-term Syracuse Early Learning Project (Caldwell and Richmond, 1968). The purpose of this project was to identify those environmental features which seemed most likely to influence development. As one part of the project, the inventory was used with 286 subjects.

In 1973, 100 children from the original sample of 286 were located in the Syracuse area schools and correlations were made with school grades, standardized test scores, and curriculum levels achieved. In Elardo, Bradley, and Caldwell (1975) all subscales of the instrument and the total score correlated significantly over a 2-year period from the 12th to 36th month with school ratings. In Van Doorninck, Caldwell, Wright, and Frankenburg (1976) the total score and four of the six subscales of the instrument correlated significantly with school ratings over a 4- to 9-year period. In both studies, "emotional and verbal responsibility of the mother" and "provision of appropriate play materials" were among the most predictive subscales.

Comments: The measurement of home environment is becoming an important research area. This scale is an interesting one, and, indeed, early validity data show promise. However, caution should be used in interpreting the "total" score. One wonders if it makes sense to sum scores derived from different "factors."

One must also be cautious in using stanine scores based on a sample of limited size (N=124).

An 80-item version of HOME, for use with children ages 3 to 6 years, is very similar to the instrument described here.

References:

Caldwell, Bettye M. Descriptive evaluations of child development and of developmental settings. *Pediatrics*, 1967, *40*, 46–54.

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Elardo, R., Bradley, R., and Caldwell, Bettye M. The relation of infants' home environments to mental test performance from 6 to 36 months: A longitudinal analysis. *Child Development*, 1975, *46*, 71–76.

Van Doorninck, William, Caldwell, Bettye M., Wright, Charlene, and Frankenburg, William. *The relationship between the 12-month inventory of home stimulation and school competence.* Unpublished manuscript, Department of Pediatrics, University of Colorado Medical Center, 1976.

Availability:

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Instrument Copyright: Bettye M. Caldwell, Ph.D.

Caldwell, Bettye M.

HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT (HOME)

Child's Name________________________ Date of Interview______________

Child's Birthdate________________ Interviewer________________

Relationship of Person interviewed to child________________ Place of Interview________________

Family Composition________________________________
(Indicate persons living in household, including sex and age of children)

Persons present in home at time of interview________________

Comments________________________________

STANINES (N = 124)

RAW SCORES	1	2	3	4	5	6	7	8	9	Mean	S.D.
I	1-3	4	5-6	7	8	9	10	11	-	7.8	2.3
II	1-2	3	4	5	-	6	7	8	-	5.5	1.5
III	1-2	3	-	4	5	-	6	-	-	4.8	1.2
IV	1	2	3-4	5	6	7	8-9	-	-	6.1	2.5
V	-	1	2	-	3	4	5	6	-	3.4	1.7
VI	-	1	-	2	3	-	4	5	-	2.8	1.3
Total	20	20-21	22-24	25-28	29-32	33-36	37-40	41-43	44-45	30.4	7.7

Factor	Raw Score	Stanine
I Emotional and Verbal Responsivity of Mother		
II Avoidance of Restriction and Punishment		
III Organization of Environment		
IV Provision of Appropriate Play Materials		
V Maternal Involvement with the Child		
VI Opportunities for Variety in Daily Routine		
Total		

	YES	NO
I. EMOTIONAL AND VERBAL RESPONSIVITY OF MOTHER		
1. Mother spontaneously vocalizes to child at least twice during visit (exclude scolding).		
2. Mother responds to child's vocalizations with a vocal or verbal response.		
3. Mother tells child the name of some object during visit or says name of person or object in a "teaching" style.		
4. Mother's speech is distinct, clear, and audible to interviewer.		
5. Mother initiates verbal interchanges with observer -- asks questions, makes spontaneous comments.		
6. Mother expresses ideas freely and easily and uses statements of appropriate length for conversation (e.g., gives more than brief answers).		
*7. Mother permits child occasionally to engage in "messy" types of play.		
8. Mother spontaneously praises child's qualities or behavior twice during visit.		
9. When speaking of or to child, mother's voice conveys positive feeling.		
10. Mother caresses or kisses child at least once during visit.		
11. Mother shows some positive emotional responses to praise of child offered by visitor.		
SUBSCORE		
II. AVOIDANCE OF RESTRICTION AND PUNISHMENT		
12. Mother does not shout at child during visit.		
13. Mother does not express overt annoyance with or hostility toward child.		
14. Mother neither slaps nor spanks child during visit.		
**15. Mother reports that no more than one instance of physical punishment occurred during the past week.		
16. Mother does not scold nor derogate child during visit.		
17. Mother does not interfere with child's actions or restrict child's movements more than three times during visit.		
*18. At least ten books are present and visible.		
*19. Family has a pet.		
SUBSCORE		

* May require an interview probe unless can be observed.
** Will require interview probe unless mother mentions spontaneously.

		YES	NO
	III. ORGANIZATION OF PHYSICAL AND TEMPORAL ENVIRONMENT		
**20.	When mother is away, care is provided by one of three regular substitutes.		
**21.	Someone takes child into grocery store at least once a week.		
**22.	Child gets out of house at least four times a week.		
**23.	Child is taken regularly to doctor's office or clinic for check-ups and preventive health care.		
*24.	Child has a special place in which to keep his toys and "treasures."		
25.	Child's play environment appears safe and free of hazards.		
	SUBSCORE		
	IV. PROVISION OF APPROPRIATE PLAY MATERIALS		
*26.	Child has one or more muscle activity toys or pieces of equipment.		
*27.	Child has push or pull toy.		
*28.	Child has stroller or walker, kiddie car, scooter, or tricycle.		
29.	Mother provides toys or interesting activities for child during the interview.		
*30.	Provides learning equipment appropriate to age -- mobile, table and chairs, high chair, play pen.		
*31.	Provides learning equipment appropriate to age -- cuddly toy or role-playing toy.		
*32.	Provides eye-hand coordination toys -- items to go in and out of receptacle, fit together toys, beads.		
*33.	Provides eye-hand coordination toys that permit combinations -- stacking or nesting toys, blocks or building toys.		
*34.	Provides toys for literature and music (books, records, toy musical instruments).		
	SUBSCORE		
	V. MATERNAL INVOLVEMENT WITH CHILD		
35.	Mother tends to keep child within visual range and to look at him often.		
**36.	Mother "talks" to child while doing her work.		
*37.	Mother consciously encourages developmental advance.		
*38.	Mother invests "maturing" toys with value via her attention.		
**39.	Mother structures child's play periods.		
*40.	Mother provides toys that challenge child to develop new skills.		
	SUBSCORE		
	VI. OPPORTUNITIES FOR VARIETY IN DAILY STIMULATION		
**41.	Father provides some caregiving every day.		
**42.	Mother reads stories to child at least three times weekly.		
**43.	Child eats at least one meal per day with mother and father.		
**44.	Family visits or receives visits from relatives approximately once a month.		
**45.	Child has three or more books of his own.		
	SUBSCORE		

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Title: TAXONOMY OF HOLDING PATTERNS

Author: Grimes, Judith Ann

Variable: The positions and body parts which a caregiver uses to support and/or hold a child are the subject of this taxonomy.

Description:

Nature and Content: This instrument consists of two parts. One part is a table labeled "Taxonomy of Holding Patterns." Across the top of the table are headings which identify positions of the infant, i.e., horizontal recumbent, flexed, vertical, horizontal prone, and vertical reclining; down the right side of the table are names which identify the physical part of the caretaker providing the principal means of support for the infant, i.e., knees, lap, torso front, torso side, arm, and shoulder. Using the word "Position" followed by a numeral, a matrix has been developed which identifies the position of the infant and the supporting part of the caretaker, e.g., Position 1 identifies the infant as being in a horizontal recumbent position on the lap of the caretaker; Position 6.1 identifies the infant as being in a flexed position on the knees of the caretaker. The second part of the instrument is a series of numbered pictures which correspond to and illustrate the positions numbered on the table of the first part.

Administration and Scoring: The taxonomy in its present form was not designed to be administered and scored.

Development:

Rationale: The taxonomy was developed to provide a "type of shorthand" which could be used while making observations and thus allow more descriptive note-taking on other observed behaviors (Grimes, 1974).

Source of Items: In the process of collecting data for a master's thesis, Grimes (1974) observed 10 caretaker-infant units and made extensive notes.

Procedure for Development: The author categorized the data which resulted from her observations.

Reliability and Validity: No information on reliability and validity are yet available for this instrument.

Use in Research: The taxonomy has not been used in any research.

Comments: This taxonomy is one attempt to categorize a series of detailed behavioral observations. Any investigator interested in caretaker-child interaction might find it useful. The taxonomy appears to have potential for development into an instrument that lends itself to quantification.

References:

Grimes, Judith A. *Contact comfort of caretakers in a hospital setting.* Master's thesis, University of Arizona, 1974.

Source of Information:

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Tucson, Ariz. 85717

Instrument Copyright: None.

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TAXONOMY OF HOLDING PATTERNS

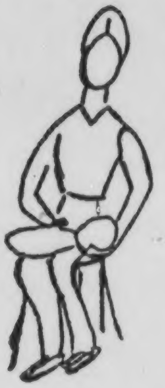
	Infant[a]				
Caretaker	Horizontal Recumbent	Flexed	Vertical	Horizontal Prone	Vertical Reclining
Knees		Position 6.1			
Lap	Position 1	Position 8	Position 6.2	Position 7	
Torso front	Position 2a	Position 9	Position 5	Position 10	Position 11
Torso side	Position 3				
Arm	Position 2b				
Shoulder			Position 4		

[a] Position numbers are related to numbered pictures in Figure 3.

Recumbent lap

1. The infant was placed on his stomach across the caretaker's thighs. One of her hands supported the chin and one hand rested on the back.

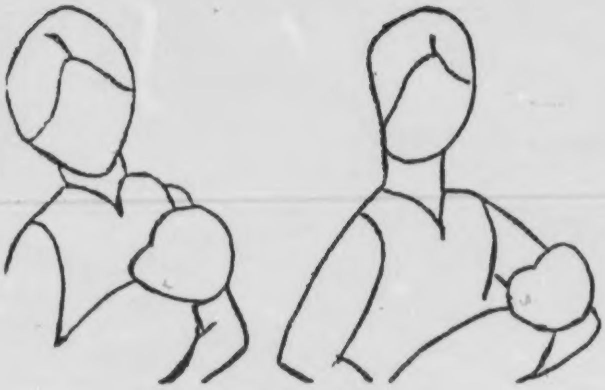
1



Horizontal torso

2. The infant was held horizontal to the torso of the caretaker
    - a. with torso contact, that is, cradled in the arms, as in the nursing position.
    - b. without torso contact, leaning against the arm and away from the torso.

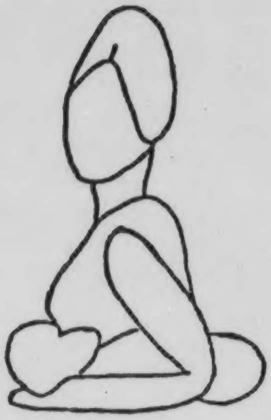
2



Horizontal underarm

3. The infant's body was held horizontally under an arm like a football for shampoo.

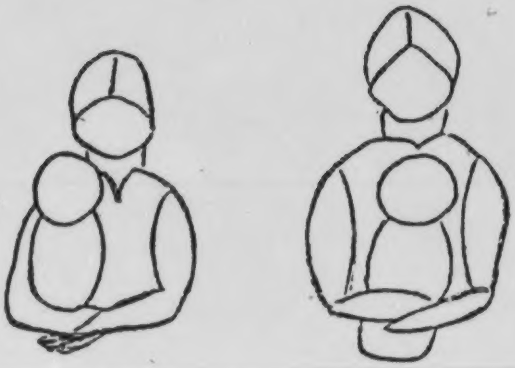
3



Upright shoulder

4. The infant was held upright over the shoulder or upright against the chest.

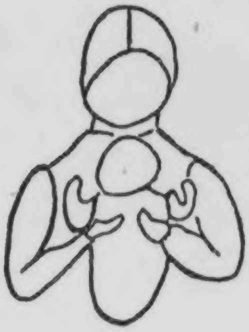
4



Upright torso

5. The hands of the caretaker were under the arms of the infant.

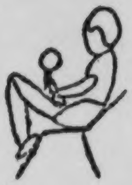
5



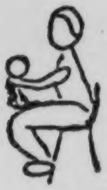
Sedentary lap

6. The infant was seated on the lap
    6.1 away from the caretaker's torso with (6.1a) knee lean and (6.1b) without knee lean.
    6.2 with torso contact.

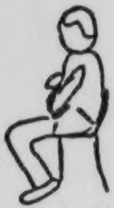
6



6.1a



6.1b

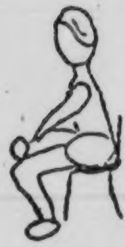


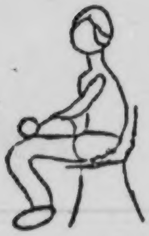
6.2

Supine or Prone lap

7. The infant was placed lying on the caretaker's lap on his back or stomach; slanted downward or on a straight plane.

7

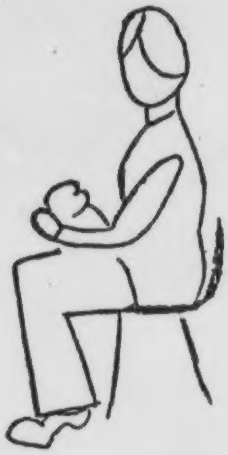




Semi-sedentary lap

8. The infant was held in a semi-sitting position by the hands of the caretaker on her lap.

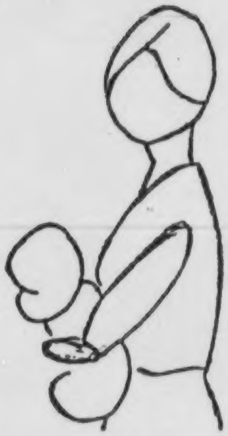
8



Flexed abdomen

9. The infant was placed against the caretaker's abdomen with the head hanging forward and the caretaker's arm across the infant's chest.

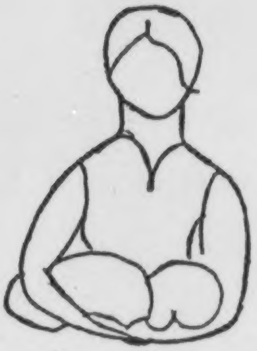
9



Prone abdomen

10. The infant was placed in horizontal position on the stomach over the caretaker's left arm which was against her body. Later the caretaker placed her right arm over the infant.

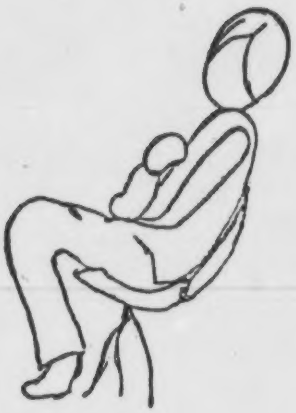
10



Upright reclining torso

11. The infant was lying on the abdomen and chest of the caretaker as she leaned back in a chair.

11



Title: TACTILE CONTACT BEHAVIOR—FIELD RECORDING FORMAT

Author: Heims, Marsha L.

Variable: The variable is the tactile contact behavior of an adult with a child in the parenting process, i.e., the touching of a child by an adult who is or seems to be in charge of the child.

Description:

Nature and Content: The Field Recording Format is a rapid recording field technique and a code sheet on which the observer records the adult-to-child contact behaviors as they occur in selected natural settings during a preset period of time.

The behavior is recorded using an accompanying code which identifies the adult and child body parts involved, the momentum of the contact, the frequency of the contact, and, in some instances, the position of the adult part.

The entire format and coding system have been designed for rapid recording.

Administration and Scoring: An observer uses the format sheet and the Standard Code Sheet to record the tactile contact behaviors of an adult and child. At the end of the predetermined observation time period, the results may be summarized in tables and graphs, and also on the "Plotting Sheet for Tactile Behavior." This sheet has two dimensions—one ranging from "low" to "high" to indicate the momentum of the contact and the other from "Ignores the child" to "Hostile" to indicate the "type of touch" (Heims, 1974).

Development:

Rationale: No information regarding the underlying theoretical framework was provided.

Source of Items: There are no items, as such, in the format. However, the code for recording the observations was adopted from Birdwhistle and the behavioral episode is a concept used by Barker and Wright (Heims, 1974).

Procedure for Development: No information was provided.

Reliability and Validity: No information was provided.

Use in Research: Heims (1974) developed and used the Field Recording Format for her master's thesis—"Child Touching Behavior of Adults." In the study, the author observed and recorded the tactile contact behavior of 10 adults with children for periods of 5 minutes each in two different settings.

Comments: The Field Recording Format with its accompanying code for recording is one attempt to describe systematically the child-touching behavior of adults. It does not purport to do more.

In describing the Format, the author provided the following information:

> Many of the touches occur very fast; rapid recording experience is very necessary so that recording can be accomplished without looking at the paper. Subjects frequently move out of visual range before the time period is finished so that a new observation period would have to be begun with another subject (Heims, 1974).

References:

Heims, Marsha L. *Child touching behavior of adults.* Unpublished master's thesis, University of Arizona, 1974.

Source of Information:

Mrs. Marsha L. Heims, R.N., M.S.
970 Bay Street, Apartment 1
San Francisco, Calif. 94109

Instrument Copyright: Marsha L. Heims, R.N., M.S.

Heims, Marsha L.

TACTILE CONTACT BEHAVIOR - FIELD RECORDING FORMAT

Abbreviations and Symbols for Field Format

Abbreviation	Explanation
H	head, including ears and hair
fa	face, only
h	hand, and all fingers
hi	hips, side only
bu	buttocks
peri	perineal area, front
le	legs
fo	foot, or feet
li	lips
fi	fist
ne	neck
sh	shoulders
tr	trunk
la	lap
ar	arms
R	right side
L	left side
1-1-1	behavior repeated without interruption of another behavior. Slashes indicate the number of repeats in succession.
< >	both
a	flat hand
B	grasp
→	indicating separation of adult and child body part, arrow is to child.

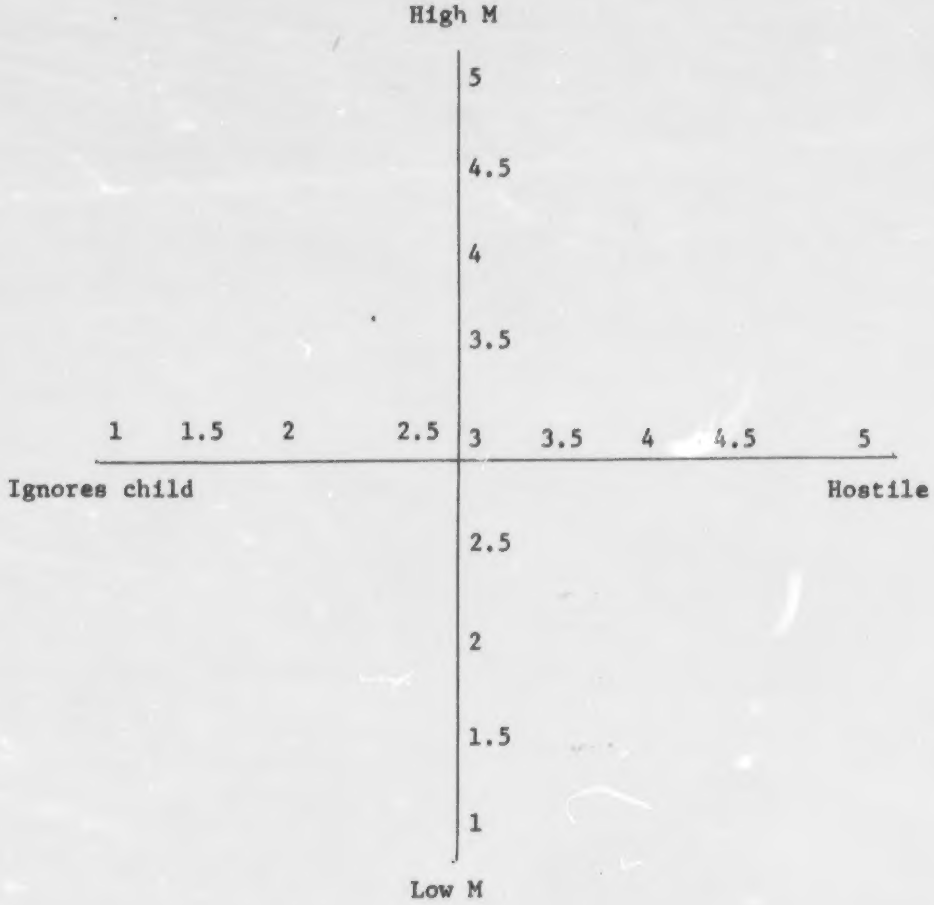
Body Parts of Adults with Examples of Momentum

	Body part	Momentum
I.	Right hand touches-flat	1-light touch 2-moderate touch 3-hard slap
II.	Right hand touches-grasp	1-hand hold 2-snug hold 3-very tight grasp
III.	Left hand flat	see I.
IV.	Left hand grasp	see II.
V.	Face touches	1-light brush 2-moderate brush 3-firm touch
VI.	Head touches	1-head brush 2-head bump 3-knocking heads
VII.	Lip touches	1-lip touch, light 2-smack 3-loud smack
VIII.	Trunk touches	1-sitting beside 2-sitting closely beside 3-sitting tightly
IX.	Pelvic touches	1-standing contact 2-lap contact 3-firm lap contact
X.	Buttocks	1-standing contact 2-sitting on, lightly 3-sitting on, hard
XI.	Left arm	1-light brush 2-arm around or light push 3-tight hug or hard push
XII.	Right arm	see XI.

	Body part	Momentum
XIII.	Left leg	1-light brush 2-moderate push 3-shove
XIV.	Right leg	see XIII.
XV.	Left foot	1-light touch 2-moderate push 3-kick
XVI.	Right foot	see XV.

Episode number	Setting 1-clinic 2-park	Sex 1-male 2-female		Time 1-AM 2-PM	Right-1 Left-2	Adult body part code #	Flat-1 Grasp-2	Momentum number	Child body part code #
		Ad.	Ch.						

PLOTTING SHEET FOR TACTILE BEHAVIOR


High M
5
4.5
4
3.5
1
1.5
2
2.5
3
3.5
4
4.5
5
Ignores child
Hostile
2.5
2
1.5
1
Low M

Vertical ordinate = Momentum (M), 1 through 5

Horizontal ordinate = Type of touch, from Ignoring Child
to Hostility

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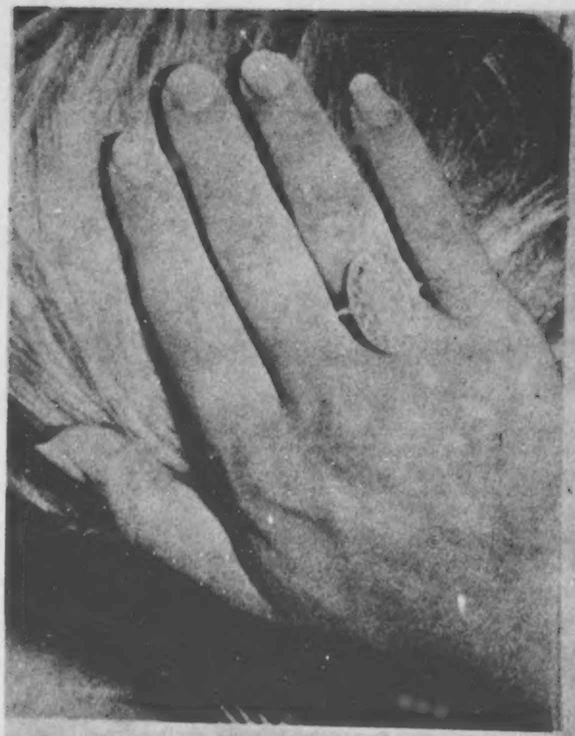
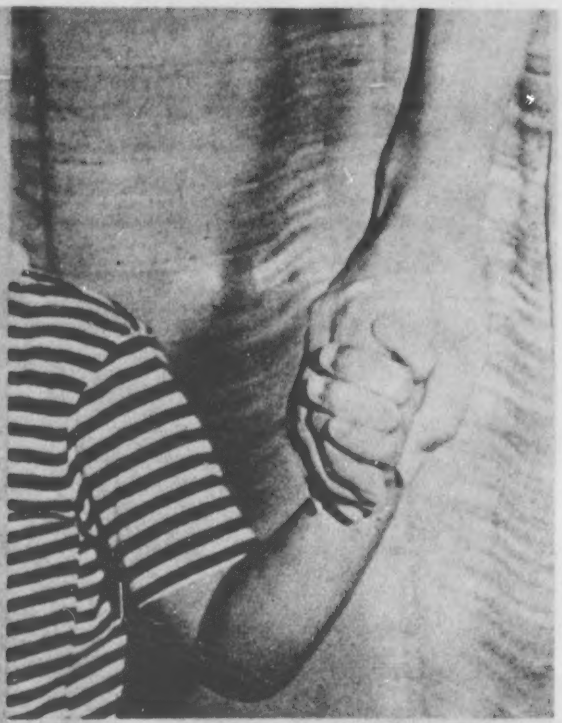
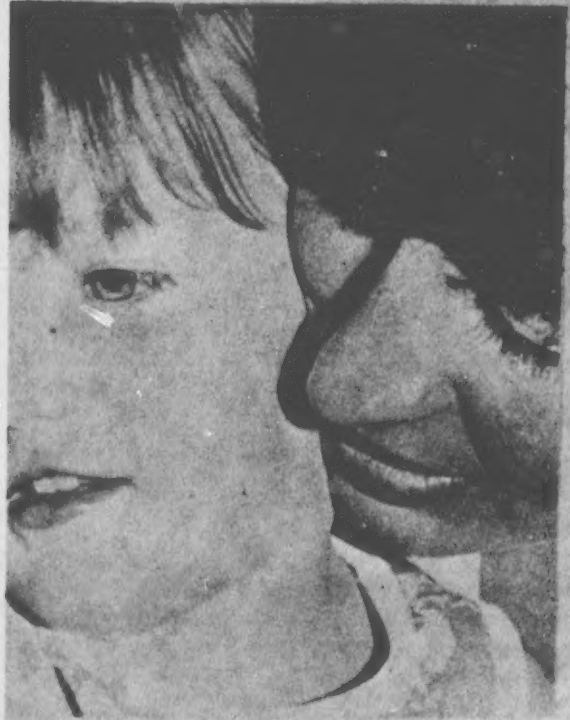


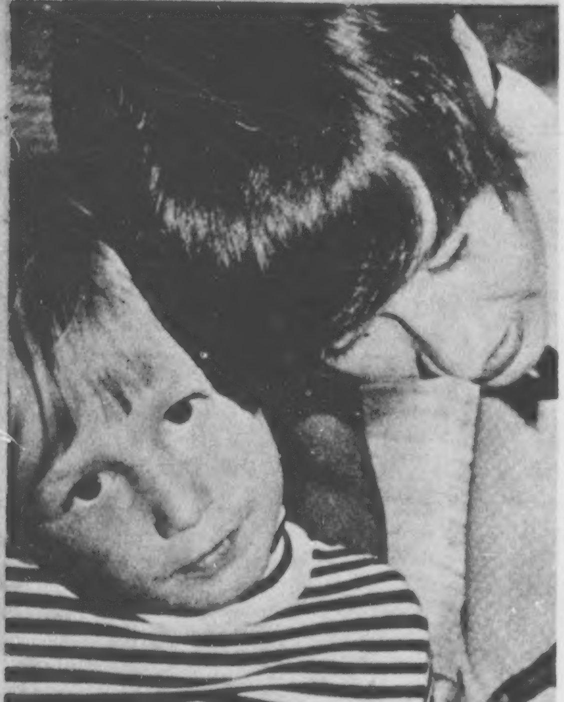
I. HAND, FLAT.



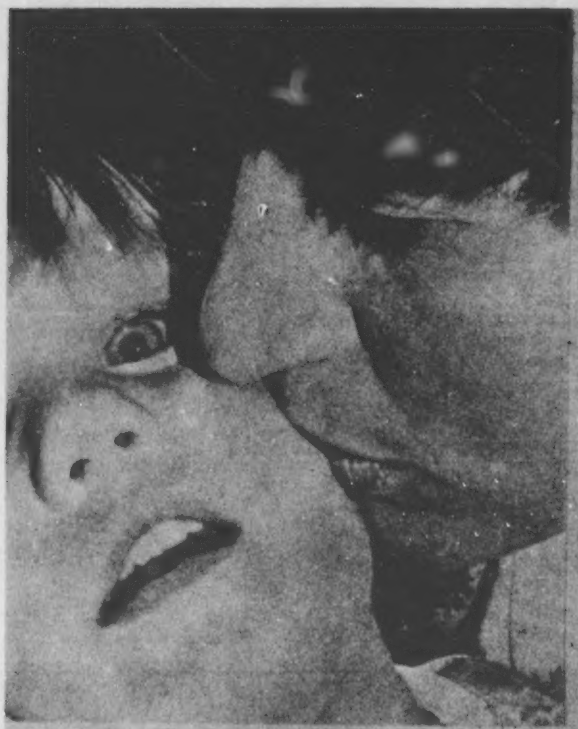
I. HAND, GRASP.



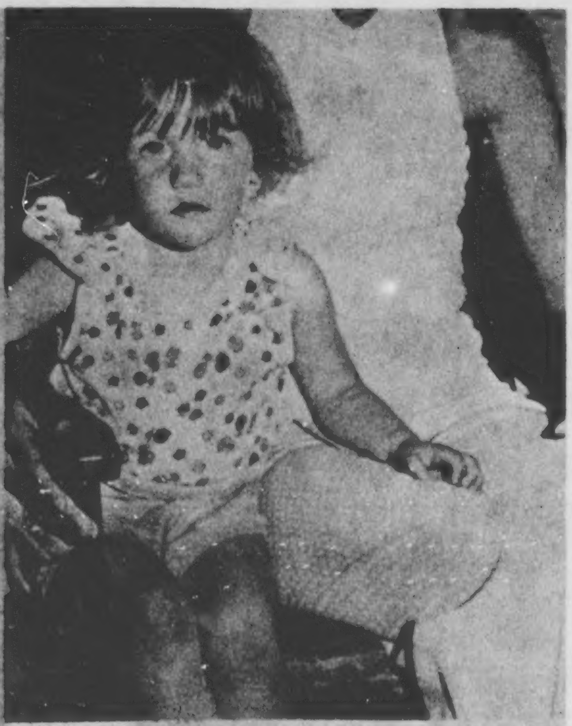
II FACE.



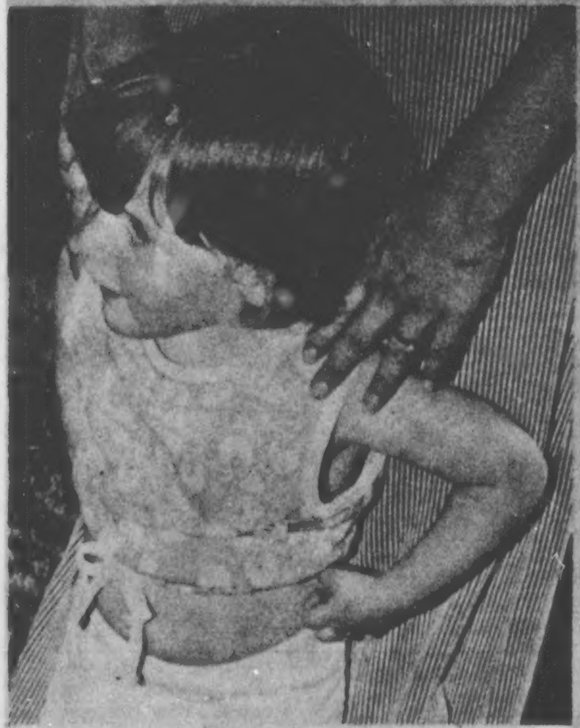
III HEAD.



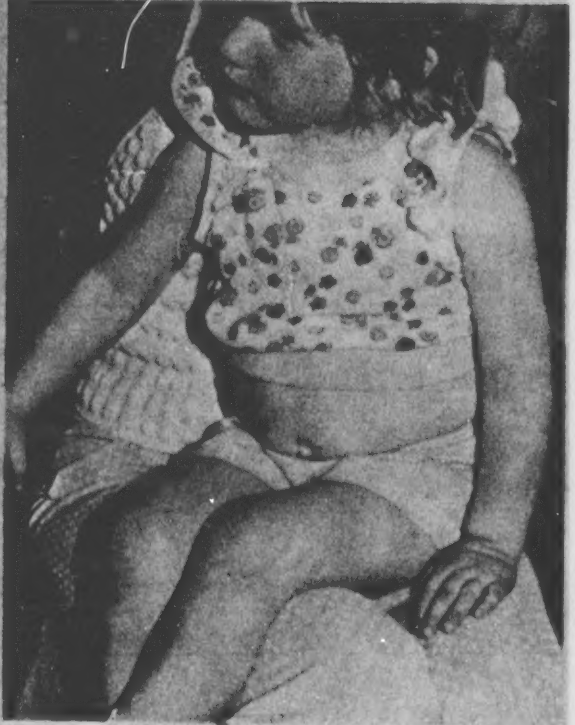
IV. LIPS.



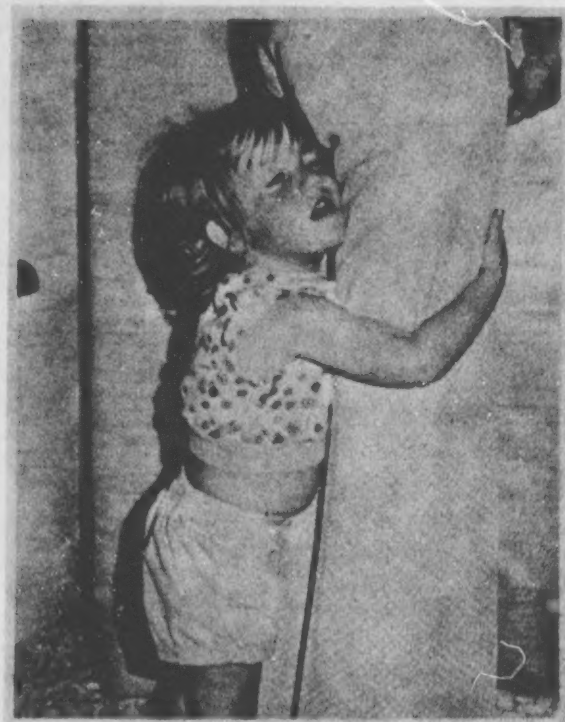
V. TRUNK.



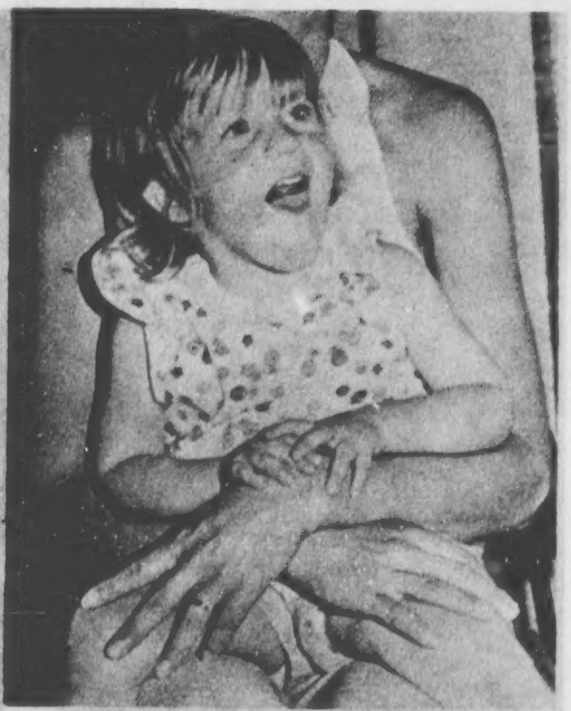
VI. PELVIC, STANDING.



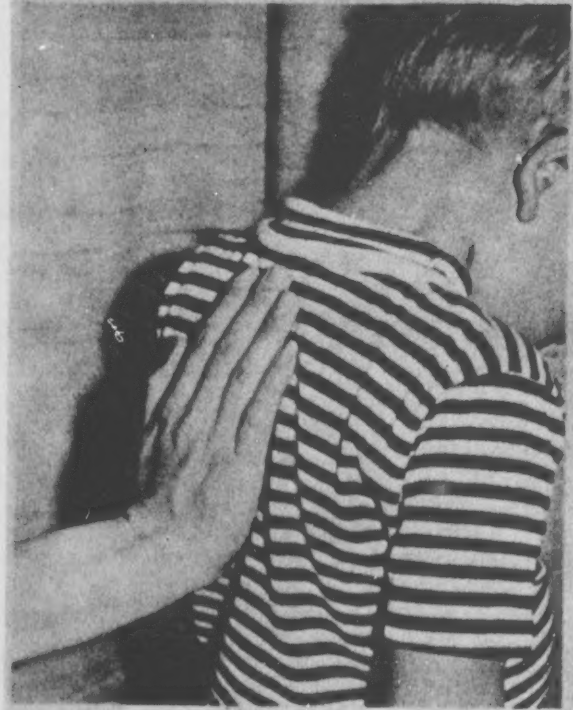
VI. PELVIC, LAP.



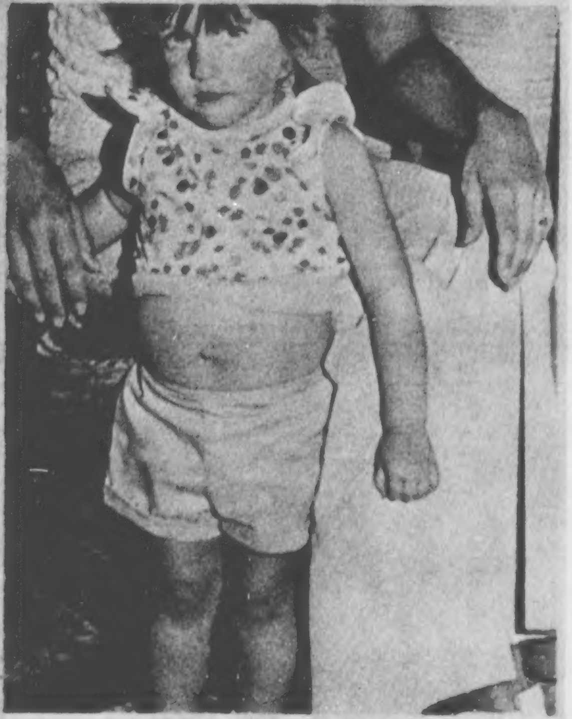
VII BUTTOCKS.



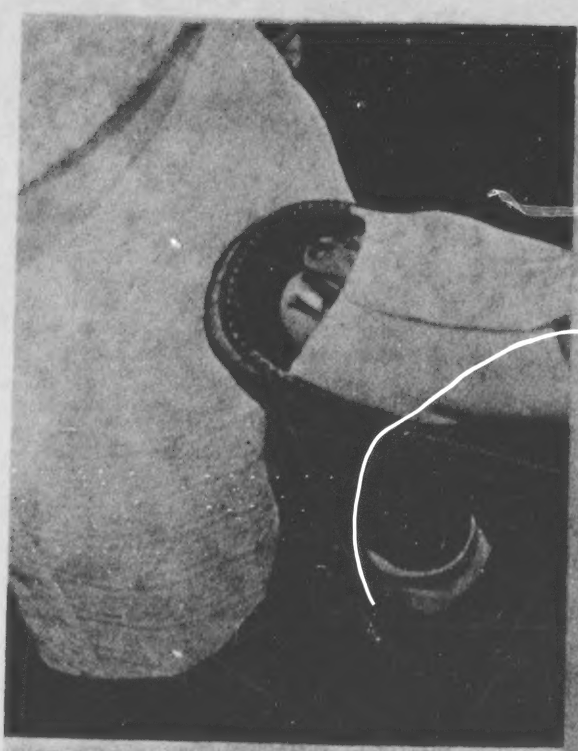
VIII. ARMS, HUG.



VIII ARM, PUSH.



IX LEGS.



X FOOT. KICK.

X FOOT.

Title: MOTHER-INFANT SEPARATION QUESTIONNAIRE

Author: Johnson, Suzanne H.

Variables: The instrument was designed to measure maternal-infant separation in terms of the length of separation from date of birth to onset of selected care-giving activities.

Description:

Nature and Content: This is a 21-item questionnaire which can be self-administered by the mother. The first seven items are specifically designed to measure length of separation. The remaining items are used to record demographic data and information regarding a mother's perceptions of her infant, the history of her pregnancy, etc. Items 1 through 7 are answered by checking a box indicating days or weeks of separation. A typical item is "How old was your baby when he first came home?" The possible responses range between "less than 1 week" to "6 or more weeks."

Administration and Scoring: The items in the questionnaire are self-rated by the mother. The response alternatives for each item are designated by a series of boxes from which the respondent can choose the appropriate one. A checkmark is placed in that box.

Items 2, 3, 4, 5, and 7 are scored from 1 to 7; item 1 is scored from 5 to 1; and item 6 is scored from 7 to 1.

A total score for "separation" is computed by adding the ratings for the first seven items and subtracting a value of 7 to permit a 0 score. The possible range of total scores is from 0 to 40. The higher the score, the greater the separation. There is no information on how items 8 to 21 were scored or analyzed.

Development:

Rationale: The increased transportation of premature infants to specialized care centers results in increased separation between the infant and the parent. It is thought that this mother-infant separation during the critical newborn period may affect normal mother-infant attachment.

Source of Items: The items were developed subjectively by the author and were based upon her professional nursing experience.

Procedure for Development: The author identified components of separation and then developed the questionnaire items. For instance, "next visual contact" and "next touch contact," were two of the variables considered to be components of separation.

Nine mothers whose premature infants had been admitted to the intensive care nursery of the Stanford University Hospital during the previous 13 months pretested the instrument for clarity of the questions.

Reliability and Validity: A pilot study was used to determine the test-retest reliabilith of the questionnaire. Each mother participated in two administrations of the questionnaire which were separated by an interval of 4 weeks. The correlation between administrations was greater than 0.85 for all items except number 8 and number 9. This result was significant at the 0.02 level.

Content validity was determined by having 10 health care experts rate each item in the questionnaire with respect to its relevance. The experts used a rating of 1 to 4 with 4 indicative of a great degree of relevance. The mean ratings for the items measuring separation (1 through 7) were between 3.4 and 3.9. The author considered the degree of agreement between raters to be high.

Discriminatory validity of the instrument is indicated by data from a study which compared scores of 44 mothers with transported premature infants (mean score 23.4) with scores of 15 mothers with nontransported premature infants (mean score 14.3). The t-test showed a significant difference ($p= <0.01$) in the scores of these two groups.

Use in Research: Development of this instrument is reported in a paper by Johnson cited below.

Comments: Questionnaire forms are available in English and Spanish. It should be noted that (1) only the first seven items address the extent of separation, (2) answers between items cannot be compared because each item is different in content, and (3) the time intervals provided for responses are not divided consistently. Further psychometric attention should include (1) refinement of the individual items in order to focus more sharply on the instrument's major concept, and (2) development of a scoring system which would provide for a meaningful total or combined score.

References:

Johnson, Suzanne Hall. Data gathering tool on interactional deprivation of mother and premature infant. In Majorie Batey (Ed.), *Communicating Nursing Research* (Vol. 9). Boulder, Colorado: Western Interstate Commission for Higher Education, in press.

Source of Information:
Suzanne Hall Johnson, R.N.
Maternal-Child Clinical Specialist
931 Celia Way
Palo Alto, Calif. 94303

Instrument Copyright: None.

Johnson, Suzanne H.

MOTHER INFANT SEPARATION QUESTIONNAIRE

The following questions ask about your experiences after the premature birtn of your baby. Please choose the answer which most closely describes your experience and mark an "X" in the box next to that answer.

1. Immediately after the premature birth of your baby, what was the closest contact you had with him or her?

☐ None ☐ Saw my baby ☐ Touched my baby ☐ Held my baby ☐ Took care of my baby

2. After the day of birth, how old was your baby when you next saw him or her?

☐ 1 day ☐ 2 days ☐ 3 days ☐ 4-6 days ☐ 1 week ☐ 2 weeks ☐ 3 or more weeks

3. After the day of birth, how old was your baby when you next touched him or her?

☐ 1 day ☐ 2 days ☐ 3 days ☐ 4-6 days ☐ 1 week ☐ 2 weeks ☐ 3 or more weeks

4. After the day of birth, how old was your baby when you next held him or her?

☐ 1 day ☐ 2-4 days ☐ 5-6 days ☐ 1 week ☐ 2 weeks ☐ 3 weeks ☐ 4 weeks or more

5. How old was your baby when you first got to care for him by feeding, diapering, or bathing him or her?

☐ 1 day ☐ 3-6 days ☐ 1 week ☐ 2 weeks ☐ 3 weeks ☐ 4 weeks ☐ 5 or more weeks

6. On the average, how many times a week did you visit your baby while he was in the hospital?

☐ Less than once ☐ 1-2 times a week ☐ 3-4 times a week ☐ 5-6 times a week ☐ 7-8 times a webk ☐ 9-10 times a week ☐ 11 or more times a week

7. How old was your baby when he first came home?

☐ Less than 1 week ☐ 1 week ☐ 2 weeks ☐ 3 weeks ☐ 4 weeks ☐ 5 weeks ☐ 6 or more weeks

8. How old was your baby when you first felt you were really comfortable holding and caring for him or her?

☐ Less than 1 week ☐ 1 week ☐ 2 weeks ☐ 3 weeks ☐ 4 weeks ☐ 5 weeks ☐ 6 or more weeks

9. How old was your baby when you first recognized some traits or behaviors he demonstrated that were unique to him and not like other babies or traits in your family?

☐ Less than 1 week ☐ 1 week ☐ 2 weeks ☐ 3 weeks ☐ 4 weeks ☐ 5 weeks ☐ 6 or more weeks

10. What was the birth weight of your infant who was born prematurely?

☐ under 1 lb.
☐ 1 lb. to 1 lb. 15 oz.
☐ 2lb. to 2 lb 15 oz
☐ 3 lb to 3 lb 15 oz
☐ 4 lb to 4 lb 15 oz
☐ 5 lb to 5 lb 8 oz
☐ Over 5 lbs. 8 oz.

11. How many weeks early was your baby born?

☐ no weeks early
☐ 1 or 2 weeks
☐ 3 or 4 weeks
☐ 5 or 6 weeks
☐ 7 or 8 weeks
☐ 9 or 10 weeks
☐ more than 10 weeks

12. When you were with your baby in the first six weeks after birth, how much did he relax or show comfort when you touched or held him?

☐ he tensed
☐ no relaxation
☐ little relaxation
☐ some relaxation
☐ moderate relaxation
☐ full relaxation

13. At the time of the baby's Birth, what was your age?

☐ 18 years or less
☐ 18-21 years
☐ 22-25 years
☐ 26-29 years
☐ 30-33 years
☐ 34-37 years
☐ 38 or more years

14. At the time of the baby's birth, what was your marital status?

☐ Single
☐ Married
☐ Divorced
☐ Widowed

15. What is your family's yearly income?

☐ 0 6,000 a year
☐ 6,000 to 9,999
☐ 10,000 to 14,999
☐ 15,000 to 19,999
☐ 20,000 to 24,999
☐ 25,000 and above

16. What is your cultural or ethnic background?

☐ Caucasian
☐ Negro
☐ Mexican
☐ Oriental
☐ Indian
☐ Other

17. At the time of your premature infant's birth, how many other children did you have?

☐ None
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5 or more

18. Before your infant was born prematurely, had you had any other premature births?

☐ Yes
☐ No

19. Before your infant was born prematurely, had you lost a baby from a previous pregnancy?

☐ Yes
☐ No

20. How many miles was it from your home to the Medical Center where your baby received special care?

☐ 0-5 weeks
☐ 6-10 weeks
☐ 11-20 weeks
☐ 21-30 weeks
☐ 31-50 weeks
☐ 50-100 weeks
☐ 101 or more weeks

21. Was your baby transported to the hospital where he received the special care?

☐ No ☐ Yes

Title: MATERNAL BEHAVIOR RATING SCALE

Author: Smith, Brenda Y.

Variable: The variable is "mothering behavior" which is defined as (1) the wish by the mother to succor, suckle, and feed her child as seen through active participation and interaction with the child (Benedick, 1956), and (2) the number of days it takes a mother to "take hold" of the mothering behavior (Rubin, 1961).

Description:

Nature and Content: This is a 10-item observation scale which consists of a list of mothering behaviors operationalized as (1) looking, (2) talking, (3) patting, (4) holding, (5) rocking, (6) cleaning, (7) touching, (8) suckling, (9) kissing, and (10) bubbling. Examples of each behavior are provided. Each item is rated as manifested by the mother (1) or not manifested by the mother (0).

Administration and Scoring: The instrument was designed to be used for a series of observations of each mother-infant pair for 3 consecutive days and should include at least two feeding periods per day. The author recommends that the first observation be made during the first feeding time after birth.

In the space provided, the observer indicates whether or not that behavior was observed during that period of observation.

A total score for each observation period is computed and a mean score is computed for each mother.

Development:

Rationale: The author states that the instrument was not based upon any specific underlying theory of mothering.

Source of Items: The items were derived from the literature and the professional experience of the author.

Procedure for Development: A pilot study was conducted in which the instrument was used with 10 mother-infant pairs for the first 3 postpartum days, and two observations per pair were conducted each day.

Reliability and Validity: No interrater reliability data were provided.

Content validity was established through the derivation of the items. Additional evidence of validity is provided by the following from Smith (1975):

> Mothers in an experimental group were given supportive care to prepare them for pregnancy, labor and delivery, and the baby itself. These mothers, when compared to a control group, showed significantly more mothering behaviors within the first 3 days following birth than did the mothers in the control group.

Use in Research: Smith (1975) reported that the tool had been used with more than 200 postpartum patients, both primigravida and multigravida during the period 1972–1975, and data were in the process of being analyzed.

The instrument was also used in a study which involved patients with a diagnosis of hypervalinemia (Benfield and Russell, 1975).

Comments: Smith's analysis of data should provide more information regarding the instrument per se. Since it does consist of 10 directly observable behaviors, interrater reliability should be high. Although the author defined the variable as "the wish by the mother to . . . ," the instrument measures the presence or absence of certain behaviors.

Any potential user should be cognizant of the fact that the score on the instrument, as it is now constituted, means that the indicated behavior is or is not present, not necessarily the quality of the behavior. Additional evidence regarding construct validity is needed before the total score can have real meaning.

References:

Benedik, T. Psychobiological aspects of mothering. *American Journal of Orthopsychiatry*, 1956, *26*, 273–278.

Benfield, Ruth, and Russell, Fay. Hypervalinemia: A family's reaction, a nursing challenge. *Nursing Forum*, 1975, *14* (2), 130–144.

Benfield, Ruth, Bendersky, Armantine, and Thompson, Anne. Early identification of children with learning disabilities: The preschool child. *Learning Disabilities*, January 1977.

Rubin, Reva. Puerperal changes. *Nursing Outlook*, December 1961, *9* (12), 753–755.

Smith, Brenda Y. *A study of the relationship between supportive care given to mothers in the antepartal period and progress in the "taking hold" phase in the postpartal period.* Unpublished manuscript, University of Tennessee, 1975.

Source of Information:

Brenda Y. Smith, R.N., M.N.
Maternal Child Health Nursing
College of Nursing
University of Tennessee
Memphis, Tenn. 38163

Instrument Copyright: None.

Smith, Brenda Y.

MATERNAL BEHAVIOR RATING SCALE

MATERNAL BEHAVIOR	POSTPARTUM DAY I		POSTPARTUM DAY II		POSTPARTUM DAY III	
ITEM	OBSERVATION I	OBSERVATION II	OBSERVATION I	OBSERVATION II	OBSERVATION I	OBSERVATION II
Looking						
Talking						
Patting						
Holding						
Rocking						
Cleaning						
Touching						
Suckling						
Kissing						
Bubbling						
TOTAL SCORE						

UTILIZATION OF TOOL:

1. Each day for 3 consecutive days a score is taken. (first visit: first feeding time after birth) at least 2 feeding periods per day.
2. A score is put down by each behavior as: one (1) equals obtaining the behavior; zero (0) equals not obtaining the behavior.

MOTHER:

DATES:

The selected behaviors with definitions are as follows:

Looking: mother focuses eyes on infant's face
Talking: mother makes verbal statements to infant
Patting: mother strokes and caresses infant with her fingers and hands
Holding: mother positions infant close to her body with arm around infant's body (cradle hold)
Rocking: mother sways infants backward and forward in her arms
Cleaning: mother wipes infant's face or changes his(her) diapers
Touching: mother embraces and touches infant softly, especially on the face
Suckling: mother breast-feeds or bottle-feeds the infant
Kissing: mother touces or presses her lips on infant's face, arms, hands, or body
Bubbling: mother helps infant expell air from stomach by rubbing back in any position

Significant Others: Cognitive Variables

Title: SEIZURE SURVEY

Author: Clarke, Bernardine A.

Variable: The variable under study is a person's general knowledge of epilepsy and epileptic seizures in children.

Description:

Nature and Content: The test is designed for parents or caregivers of children who have had seizures. This instrument has two sections: a survey of knowledge and an interview section.

The first section is a 52-item, true-false test of statements on the nature of the illness, its physical management, medical management, and psychosocial management. Each statement is responded to by circling the words "true" or "false," or "?" (don't know). Three sample statements are:

> Some children with seizures also have mental retardation.
>
> The brain wave test (EEG) may help your doctor know more about the nature and location of a problem in a brain.
>
> During a seizure, loosen your child's clothes, turn him on his side, and observe him until the seizure is over.

The second section of the test consists of two open-ended questions relating to problems the parents may have experienced relating to their child's seizures either at home or at school. These problems are determined by a short interview following completion of the test.

Administration and Scoring: The survey of knowledge can be administered in any quiet area and requires little or no special environment or preparation. The interview does require space and privacy so that distractions are kept at a minimum. Questions can be read to respondents who do not read or write.

Each question answered correctly is given one point for a total of 52 possible points. Answers in the column labeled "don't know" (respondents circle a question mark) are considered incorrect and do not receive a point.

Development:

Rationale: The author stated that the instrument was not derived from a specific theory.

Source of Items: Items were developed from current literature on the nature of the illness, its physical management, its medical management, its psychosocial management, and from statements made to clinic personnel by the parents during previous clinic visits.

Procedure for Development: No information was provided.

Reliability and Validity: No information concerning reliability was provided.

Content validity was established through the review of literature and by review of the instrument content by clinic personnel (Clarke, 1976).

Comments: Most of the items are straightforward, easy to understand, and cover many aspects of useful knowledge about seizures. However, it would be helpful to have the items refined, the reliability determined, and other types of validity established. It would also be helpful to have norms established so that levels of knowledge could be specified, e.g., optimum knowledge, satisfactory knowledge, unsatisfactory knowledge.

References:

Clarke, Bernardine. Personal communication, 1976.

Source of Information:

Mrs. Bernardine A. Clarke, R.N.
School of Nursing
Medical College of Virginia
Virginia Commonwealth University
Richmond, Va. 23298

Instrument Copyright: None.

Clarke, Bernardine A.

SEIZURE SURVEY

Relationship to Child ____________
Highest Grade in School ____________
Age of Informant ____________

Please answer the following questions by circling T if you feel the statement is True, F if you feel the statement is False, or ? if you do not know.

Example:

T [✓ F] ? The year is 1974.

T F ? 1. The brain works to regulate and control everything we do.

T F ? 2. A seizure occurs when brain cells become overactive.

T F ? 3. Seizures cause mental retardation.

T F ? 4. Seizures are caused by something the parents did.

T F ? 5. Some children with seizures also have mental retardation.

T F ? 6. Seizures are a punishment for wrong doing.

T F ? 7. Seizures are associated with insanity.

T F ? 8. Tests are done in order to find the cause of seizures.

T F ? 9. The brain wave test (EEG) may help your doctor know more about the nature and location of the problem in the brain.

T F ? 10. The brain wave test sometimes cures seizures.

T F ? 11. The brain wave test tells what the child's intelligence is.

T F ? 12. All tests may be normal in a person with seizures.

T F ? 13. During a seizure, loosen your child's clothes, turn him on his side, and observe him until the seizure is over.

T F ? 14. Hold your child down tightly during a seizure.

T F ? 15. Put a soft object in your child's mouth during a seizure to prevent tongue biting.

T F ? 16. After a seizure allow your child to sleep if he wants to.

T F ? 17. Keep a record of all seizures and bring it to your doctor.

T F ? 18. After a seizure it is best to keep your child awake.

T F ? 19. If a seizure lasts ten minutes or more you should take your child to the nearest hospital.

T F ? 20. A person who has just had a seizure does know what happened during the seizure.

T F ? 21. Restricted activity and idleness tend to make seizures come more frequently.

T F ? 22. Constipation may increase the frequency of seizures.

T F ? 23. Medicines help control seizures when they are taken regularly.

T F ? 24. Dilantin is a drug used to control seizures.

T F ? 25. A skin rash can be a sign of drug allergy.

T F ? 26. Medicine taken for seizures should never be changed or stopped without asking your doctor.

T F ? 27. Medication can control but does not cure seizures.

T F ? 28. Irregular use of medication can cause an increase in seizures.

T F ? 29. Children who take dilantin need to take extra care of their teeth and gums.

T F ? 30. All children with seizures have to take medicine the rest of their lives.

T F ? 31. If possible your child should be taught to be responsible for taking his own medicine as he grows older.

T F ? 32. Punishment may bring on a seizure.

T F ? 33. Children with seizures can be treated like other children at home or in school.

T F ? 34. Children tease about seizures because they and their parents do not understand.

T F ? 35. If your child misbehaves he should be treated like any other child in the family.

T F ? 36. Children should be told about their condition as soon as they can understand.

T F ? 37. A child's teacher should be told about his seizures.

T F ? 38. A child with seizures should not be allowed to spend the night with a friend.

T F ? 39. A child with seizures should be allowed to go swimming with supervision.

T F ? 40. Most children with seizures can attend public schools.

T F ? 41. A person with seizures should have regular medical visits with his doctor.

T F ? 42. Most children with seizures can participate in sports and school activities.

T F ? 43. If your child is teased by his friends you should not allow him to associate with them.

T F ? 44. Difficult behavior in your child is usually not due to the seizures themselves.

T F ? 45. A teenager should not be allowed to attend football games or dances since he may have a seizure.

T F ? 46. Driving is dangerous for a person with seizures and should not be allowed.

T F ? 47. In Virginia a person with seizures can drive if he has been free of seizures for at least a year.

T F ? 48. A person with seizures should obtain a medical report when he applies for a driver's license.

T F ? 49. Many people whose seizures are well controlled with medicine marry and lead normal lives.

T F ? 50. Vocational rehabilitation services in Virginia help people with seizures obtain training for jobs.

T F ? 51. Most persons with seizures should avoid seeking jobs that require work in high dangerous places.

T F ? 52. Seizures, convulsions and epilepsy all mean the same thing.

Problems relating to seizures:
At Home:

At School:

Significant Others: Affective Variables

Title: NEEDS OF RELATIVES OF CRITICALLY ILL PATIENTS

Author: Molter, Nancy C.

Variables: Four variables are covered by this instrument: (1) the needs of relatives of critically ill patients who are in an intensive care unit (ICU), (2) how important the relatives perceived each need to be, (3) whether or not that need was met, (4) and if the need was met, by whom. *Critically ill patients* are those patients who have spent at least 3 days in an intensive care unit and have been on a general ward for 48 hours or less. *Relatives* are persons 18 years of age or older who are related to the patient and who visited the patient while the patient was in the intensive care unit (Molter, 1976).

Description:

Nature and Content: This structured interview guide consists of 45 declarative statements each of which relates to a specific need a critically ill patient's relative may have perceived during the time the patient was assigned to an intensive care unit. Examples are: "I needed to feel accepted by hospital personnel." "I needed to know why things were being done for my relative." "I needed to know what type of staff members could give me what type of information." "I needed to talk to the same nurse each day about my relative's condition." There is an answer sheet for use with the instrument.

The answer sheet has space for recording: (1) the respondent's perception of each of the 45 "need" statements using a Likert-type scale (1=not important, 2=slightly important, 3=important, 4=very important), (2) a checkmark under a column headed "yes" or a column headed "no" to indicate whether or not the need was met, and (3) a column headed BW to indicate, if the need had been met, by whom (A=doctor, B=nurse, C=chaplain, D=other relative, E=friend, F=other visitor, G=other). There is also space for recording an answer to an open-ended question regarding needs not covered by the 45 items and five other items of demographic data about the respondent.

Administration and Scoring: As noted above, the instrument was developed to be used as an interview guide. The investigator explains the purpose of the interview to the subject, gives the subject a 5″ x 8″ card on which the possible responses are stated, then reads each statement to the subject and records each response of the subject on the answer sheet.

The interview should be conducted in a quiet place, away from the patient's bedside. If the interviewer is a nurse, the author recommends that that fact not be revealed lest it bias the subject's responses.

Scoring information for each subject, per se, was not provided; however, the author reports the scoring procedure she used in her study cited below.

It requires from 20 to 60 minutes to complete the interview.

Development:

Rationale: The instrument was based upon crisis theory and Maslow's Hierarchy of Needs theory (Molter, 1976).

Source of Items: The items were based upon a review of literature, the professional experience of the author and that of her graduate student nurse peers.

Procedure for Development: The author polled 23 graduate student nurses, asking each to list five important needs of relatives of critically ill patients that they had observed or experienced. Based upon the results of that poll and the author's experience, the interview schedule was developed. The final schedule was reviewed by two nurses who specialized in intensive care nursing and a nurse who had had a relative as a patient in an intensive care unit.

Reliability and Validity: No information concerning reliability was provided.

Content validity was established by use of professional nurses to compile the list of need statements. It was further established by having the questionnaire reviewed as described above *(Procedure for Development).*

Use in Research: The development and use of the instrument is described by Molter (1976) in her master's thesis "The Identification of Needs of and Their Importance to Relatives of Critically Ill Patients." Her sample consisted of 40 subjects (30 females and 10 males).

Comments: The statements are clear, the instrument is comprehensive, and the concept is important to nursing. The instrument could be adapted for relatives of other categories of patients and could be designed for self-administration. The reliability and validity of the instrument should be established for any study population and any setting where its use is contemplated.

An item analysis or use of factor analysis techniques might show that the instrument could be shortened without altering its usefulness.

References:

Molter, Nancy C. *The identification of needs of and their importance to relatives of critically ill patients.* Unpublished master's thesis, Emory University, 1976.

Source of Information:

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8815 Bridington Drive
San Antonio, Tex. 78239

Instrument Copyright: None.

Molter, Nancy C.

NEEDS OF RELATIVES OF CRITICALLY ILL PATIENTS

Explanation of Purpose of Interview:

Through this interview I hope to find out the types of needs you had and how important the needs were to you while your relative was in the intensive care unit. I also want to find out if your needs were met and, if so, by whom. Information concerning your age, education, occupation, and sex will help me categorize my findings.

Instructions

I will read to you a statement and then ask you to tell me if it was (1) not important at all to you, (2) slightly important to you, (3) important to you, or (4) very important to you. The card I have given to you will help you choose your answer each time. (A 5 x 8 card is given to the subject that contains the responses that they may choose from.) I will then ask you if the need was met and, if so, by whom?

Statements:

1. I needed to feel accepted by hospital personnel.
2. I needed to have my questions answered honestly.
3. I needed to be able to visit whenever I wanted.
4. I needed to have a place to be alone while in the hospital.
5. I needed to be told about the other people in the hospital that could help me.

6. I needed to have a specific person to call at the hospital when I couldn't be there.
7. Because there were visiting hours, I needed to have them start on time.
8. I needed to have a telephone nearby where I was waiting.
9. I needed to have someone help me with my financial problems.
10. I needed to have visiting hours changed because of special conditions.
11. I needed to have good food easily available to me while in the hospital.
12. I needed to feel that hospital personnel cared about my relative.
13. I needed to have the waiting room near my relative.
14. I needed to be alone.
15. I needed to know exactly what was being done for my relative.
16. I needed to be told about how my relative was going to be treated medically.
17. I needed to be told about the chaplain services.
18. I needed to feel that there was hope.
19. I needed to know why things were being done for my relative.
20. I needed to be told about transfer plans when they were being made.
21. I needed to have someone explain to me about the sounds and equipment in the intensive care unit before I went in for the first time.

22. I needed someone to talk to about the possibility that my relative might die.
23. I needed to talk to someone about my negative feelings such as guilt or anger.
24. I needed direction from the staff as to what was expected of me while I was at my relative's bedside.
25. I needed to know about the various types of staff taking care of my relative.
26. I needed to see my relative frequently.
27. I needed to have specific facts concerning my relative's progress.
28. I needed to be able to do some of the physical care of my relative.
29. I needed to have friends nearby for support.
30. I needed to talk to the doctor at least once a day.
31. I needed to have the pastor visit me.
32. I needed to have a bathroom near the waiting room.
33. I needed to be reassured that it was all right to leave the hospital for awhile.
34. I needed to have explanations given in terms I could understand.
35. I needed reassurance that the best care possible was being given to my relative.
36. I needed to know what type of staff members could give me what type of information.
37. I needed to have comfortable furniture in the waiting room.
38. I needed to have someone be concerned for my health.

39. I needed to know my relative's chances for becoming well.

40. I needed to know that I would be called at home if there were any changes in my relative's condition, good or bad.

41. I needed to talk to the same nurse each day about my relative's condition.

42. I needed someone to encourage me to cry.

43. I needed to be told about someone who could help me with my family problems.

44. I needed to receive information about my relative's condition at least once a day.

45. I needed to have another person with me when I visited my relative at the bedside.

Questionnaire Answer Sheet

Code:
1- Not Important
2- Slightly Important
3- Important
4- Very Important

By Whom: (BW)
A- Doctor
B- Nurse
C- Chaplain
D- Other relative
E- Friend
F- Other Visitor
G- Other

Quest.	1	2	3	4	Yes	No	BW	Quest.	1	2	3	4	Yes	No	BW
1								24							
2								25							
3								26							
4								27							
5								28							
6								29							X
7								30							X
8							X	31							X
9								32							X
10								33							
11							X	34							
12								35							
13							X	36							
14								37							X
15								38							
16								39							
17								40							
18								41							X
19								42							
20								43							
21								44							
22								45							
23															

Is there any other concern or need that you had that wasn't mentioned in the previous statements?

Sex____ Relationship to Patient__________ Education______ Occupation______________

Age: 18-24__ 25-34__ 35-59__ 60+__

Title: SPOUSE'S PERCEPTION SCALE

Author: Silva, Mary E.

Variable: The variable is a spouse's perceptions of a husband's or wife's hospitalization and impending surgery.

Description:

Nature and Content: This self-administered rating scale contains 46 declarative statements designed to elicit a spouse's perceptions of a mate's hospitalization and impending surgery. Responses are on a Likert-type scale with choices of: strongly agree, agree, undecided, disagree, and strongly disagree.

Administration and Scoring: The instrument was designed to be self-administered, and no special provisions are necessary. However, it should be administered a reasonable length of time before the spouse goes to surgery, e.g., the author administered it the afternoon or evening before the spouse was scheduled for surgery. The directions for completion of the scale are on the instrument, and the answer choices are explained preceding the items of the scale itself. Respondents are informed that there are no right or wrong answers and are urged "to check the statements but not to spend too much time on any one."

For scoring, response choices were assigned weights as follows: strongly agree=5 points, agree=4 points, undecided=3 points, disagree=2 points, and strongly disagree=1 point. A total score is computed for each respondent, and possible total scores range from 46 to 230. A score of 230 indicates strongly favorable perceptions toward impending surgery; a score of 91 to 46 represents strongly unfavorable perceptions. Scores ranging between 184 and 229 are interpreted as indicative of "favorable" attitudes toward surgery, those between 138 and 183 as "undecided," and those between 137 and 92 as "unfavorable."

Development:

Rationale: The instrument was not based on any specific underlying theory.

Source of Items: The instrument, instructions, and items are an adaptation of Palmer's Patients' Perception Scale (1964).

Procedure for Development: In adapting Palmer's Patients' Perception Scale for use with spouses, the pronouns were changed from "I" (designating the patient) to "my spouse" (designating the husband or wife scheduled for surgery).

The Spouse's Perception Scale was pilot-tested with 44 married students enrolled in four different classes of a large southeastern university's evening and weekend division. The pilot group included 19 women and 25 men.

Reliability and Validity: Reliability figures for the pilot test were obtained by use of the split-half method (odd versus even numbered items). The Pearson r showed a significant correlation between the subtests, i.e., r (42)=0.816, $p < 0.005$. The coefficient of reliability obtained using the Spearman-Brown Prophecy Formula was 0.899 for a test twice as long as either subtest.

Reliability of the Spouse's Perception Scale was also calculated on the author's 36 study sample spouses—24 pretested spouses and 12 posttested control spouses (14 females and 22 males). The correlation coefficient (BMD02D) showed a significant correlation between the subtests, i.e., r (34)=0.807, $p < 0.005$. The coefficient of reliability obtained by the Spearman-Brown Prophecy Formula was 0.893 for a test twice as long as either subtest.

Silva's study demonstrated the construct validity of the Spouse's Perception Scale. She found that spouses who were given orientation information about their mate's surgery showed a significantly more favorable attitude toward hospitalization and major general surgery than did those spouses who received no orientation information.

Content validity had been established through Palmer's method of developing the instrument and her use of it in a research study. Silva also pretested the instrument for content, clarity, and directions.

Use in Research: Palmer (1964) developed and used the Patient's Perception Scale in her research study referenced below. Silva (1976) adapted the scale to make it appropriate for use with spouses and used it, along with the State-Trait Anxiety Inventory (STAI), for her dissertation project, referenced below.

Comments: The good reliabilities of the Palmer scale are matched by those of Silva's adaptation. Attention has been paid to validity, and further use of the scale should strengthen both the validity and the reliability of the instrument.

The author recommended that during administration the following be stressed: (1) spouses read the instrument directions carefully, (2) spouses not dwell on or spend an inordinate amount of time on any one item, and (3) spouses interpret items in terms of their own experience.

The potential user should examine each item on the instrument to insure its being equally applicable to all potential subjects. Additional attention should be addressed to the response alternatives, the scoring system, and the interpretation of the scores, i.e., can one have an "undecided" attitude toward surgery?

For interpreting the scores, each of the categories "strongly favorable," "unfavorable," "undecided," and "favorable" is represented by a range of values; the category "strongly favorable" has only a single value, i.e., 230.

References:

Palmer, Irene. *Perceptions of patients to imminent general surgery: A comparative analysis of the expressed perceptions of patients between the ages of twenty-one and sixty years of age to cholecystectomy, gastrectomy, and herniorrhaphy.* Unpublished doctoral dissertation New York University, 1964.

_____. The development of a measuring device: Measuring patients' perceptions toward impending surgery. *Nursing Research*, 1965, *14* (2), 100–105.

Silva, Mary E. *The effect of orientation information on spouse's anxiety and attitude toward hospitalization and major general surgery.* Unpublished doctoral dissertation, University of Maryland, 1976.

Source of Information:

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Instrument Copyright: Mary E. Silva, R.N., Ph.D.

Silva, Mary E.

SPOUSE'S PERCEPTION SCALE

Directions

The enclosed pages contain some statements about how spouses feel about a husband's or wife's impending surgery. There are no right or wrong answers to these statements. Let your own personal feelings determine your answers. Please check each statement in terms of whether you strongly agree, agree, are undecided, disagree, or strongly disagree. Check ALL statements but do not spend too much time on any one.

Checking a statement strongly agree means that you definitely and emphatically agree with it.

If you definitely disagree and have no doubt about your disagreement, check strongly disagree.

If you are not really sure about how you feel about a statement, check undecided.

If you agree with the statement generally, but are not completely emphatic about it, check agree.

If you disagree with the statement, but are not really emphatic in your disagreement with it, check disagree.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. Soon my spouse is going to be able to do all the things he (she) used to do.					
2. I can take this surgery in my stride.					
3. My spouse will be up and doing things for himself (herself) in a few days.					
4. Surgery is a quick way to get well.					
5. Surgery is much safer today than it was in my parents' time.					
6. The staff help make people comfortable when they have pain.					

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
7. The thought of my spouse having an incision does not upset me.					
8. The immediate family knows how to manage while my spouse is in the hospital.					
9. Hospitals are the best place to be when you are sick.					
10. With God's help this operation is going to restore my spouse's health.					
11. I know what is going to happen to my spouse.					
12. Money is of little importance at a time like this.					
13. The pain after the operation is not going to amount to much.					
14. The immediate family is able to take care of itself while my spouse is in the hospital.					
15. Even though my spouse is being operated upon, there are some things he (she) is able to do for himself (herself).					
16. If you have lots of faith in God, being operated on need not worry you.					
17. Medical science takes the chance out of an operation today.					
18. Surgery is necessary to my spouse's future health and well-being.					
19. My spouse is doing everything the way the doctors and nurses want.					
20. Now is the best possible time for this surgery.					
21. The people closest to me understand how I feel about my spouse's surgery.					
22. What my spouse might say coming out of the anesthesia does not concern me.					

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
23. My spouse is receiving the best possible care.					
24. This operation is going to remove my spouse's source of discomfort.					
25. It is a relief to me that the entire situation is out of my hands.					
26. The people who are taking care of my spouse are a great source of strength to me.					
27. Incisions are not very noticeable these days.					
28. At times like this I am glad to depend on other people.					
29. The experience of my spouse's surgery is like an adventure to me.					
30. I have confidence in the skill of the hospital staff.					
31. The people who are caring for my spouse give me courage.					
32. There is no need to worry about one's spouse being operated upon.					
33. Pain can be overcome in a situation like this.					
34. Modern drugs make people comfortable.					
35. Soon my spouse can take up where he (she) left off.					
36. Most of my questions about the operation have been answered.					
37. I am being as little trouble as possible for the people taking care of my spouse.					
38. A scar from surgery does not matter.					

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
39. This operation creates no problem for the immediate family.					
40. With faith in God everything turns out well.					
41. I can take what goes on before and after the operation.					
42. We get wonderful care in our hospitals today.					
43. It is a relief I have no more decisions to make.					
44. The people who are taking care of my spouse know how I feel about his (her) operation.					
45. With prayers all turns out well.					
46. My spouse can lead his (her) usual life after the operation.					

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Title: WIFE'S PERCEPTION OF LOSS AFTER HER HUSBAND'S MYOCARDIAL INFARCTION QUESTIONNAIRE

Author: Smith, Linda S.

Variable: A wife's subjective perception of loss in the areas of (1) financial security, (2) emotional closeness to her husband, (3) her husband's physical strength, (4) open communication with her husband, and (5) sexual relations with her husband following his myocardial infarct is the variable under study.

Description:

Nature and Content: This is a self-administered instrument with 33 items designed to "discover how wives of patients who have had heart attacks feel and respond to the situation." Six items elicit demographic data about the wife, husband, and family; the remaining items follow a variety of formats, i.e., some are multiple choice, some are open-ended questions, and some are rating-scale type items to which the respondent indicates her degree of agreement or disagreement. Response choices are: strongly disagree, slightly disagree, slightly agree, and strongly agree.

Administration and Scoring: No special preparation is necessary for the investigator or the respondent other than the respondent needs approximately 35 minutes of privacy during which to complete the questionnaire.

For interpretation of responses, the wife's perception of loss after her husband's heart attack is subdivided into five areas. The loss of financial security is measured by eight questions (5, 6, 7, 8a, 8b, 9, 10, 11). Five questions measure physical strength loss (12, 13, 14, 15, 16). Loss of sexual relations is measured by six items (17, 18, 19, 20, 21, 22). Five items measure loss of emotional closeness (23, 24, 25, 26, 27). Open communication is measured by four items (28, 29, 30, 31). One question identifies the area of loss which has affected her most (32), and the final question elicits her perception of medical personnel's role in her situational crisis (33). The instrument is not scored.

Development:

Rationale: The author stated that the instrument was based upon Hogue's (1974) "Paradigm for the Study of Stressful Life Events, Coping, and Health Change in Middle Age."

Source of Items: The items were based upon a review of literature and the author's professional experience as a liaison nurse practitioner who teamed with a cardiologist to provide preventive, restorative, and maintenance care to clients who moved from the cardiac intensive care unit to the progressive care unit, home, and then to the cardiologist's office for followup and evaluation.

Procedure for Development: The instrument was initially reviewed by three nurse researchers who held earned doctorates and a fourth-year medical student all of whom were interested in the management of loss and grief. Their critique resulted in minor changes of wording and categorization of responses. New response alternatives were added to several questions.

Following that revision, the instrument was reviewed by two cardiovascular nurse practitioners who suggested the addition of a set of response alternatives to one question. The group felt that the instrument had both content and face validity.

Finally, the instrument was pretested by one subject, due to low patient census. The pretest did not result in any changes in the instrument.

Reliability and Validity: No information on the test-retest, split-half, or odd-even reliability of the instrument was available.

As one effort to assure reliability, each item was written to convey one concept only, and instructions were written which are brief, concise, and simple. To establish the reliability of the measurement of the categories of loss, several similar questions with varied wording were asked in each category.

Content validity was addressed by having each item in the instrument reviewed by two cardiovascular nurse clinicians who were experts in coronary care and three nurse researchers.

Use in Research: The instrument was developed and used by Smith (1975) in a research project required for a Master of Science degree in nursing at Duke University. Her study sample included 17 wives whose husbands had sustained their first myocardial infarct and had been admitted to one of five hospitals in the central Piedmont area of North Carolina.

Comments: This instrument is still in the early stages of development; however, it does appear to have potential for accomplishing the purpose for which it was developed. In its present stage of development, the items are a mixed collection of questions and statements for which a score for a variable cannot be obtained, e.g., item 6 and item 9 both deal with finances but, as constituted, are not scoreable together. The wording of the items should be revised so that all follow the same format, i.e., all questions or all declarative statements; then, the response choices should be revised to match the new item format. Additional reliability and validity evidence should be obtained.

References:

Hogue, Carol C. *Coping resources, stress, and health change in middle age.* Unpublished doctoral dissertation, University of North Carolina, 1974.

Smith, Linda S. *The wife's perception of loss after her husband's heart attack.* Unpublished research project, Duke University, 1975.

Source of Information:

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Instrument Copyright: None.

Smith, Linda S.

WIFE'S PERCEPTION OF LOSS AFTER HER HUSBAND'S MYOCARDIAL INFARCTION QUESTIONNAIRE

Directions:

Place an X mark in the box which indicates how you feel about the question. In questions where no boxes are used, please write your answer on the lines provided below the question.

1. How old are you? (years) _______
   How many children do you have? _______
   How many of these live in your home? _______

2. How long have you and your husband been married? (years) _______.

3. Describe your education below by checking any which are true for you.

   Did not complete elementary grades ( )
   Completed high school ( )
   Completed college ( )
   Other ( ) Please explain ______________.

4. How old is your husband? (years) _______

5. My husband's status as the provider has changed.

   Strongly disagree ( )
   Slightly disagree ( )
   Slightly agree ( )
   Strongly agree ( )

6. I foresee heavy economy burdens in the future.

   Strongly disagree ( )
   Slightly disagree ( )
   Slightly agree ( )
   Strongly agree ( )

7. I feel a loss of economic security since my husband's heart attack.

   Strongly disagree ( )
   Slightly disagree ( )
   Slightly agree ( )
   Strongly agree ( )

8A. Before your husband's heart attack, were you working? (Check any which are true for you).

   Housewife ( )
   Work, full-time ( )
   Work, part-time ( )
   Not working for pay ( )

8B. Are you doing anything extra to supplement the income now?

Yes ☐
No ☐

If you said yes, please explain ______________________________.

9. In the future, do you anticipate doing anything extra to supplement the income?

Yes ☐
No ☐

10. If you answered yes to #9, mark any of the following activities that you may do in the future to supplement the income.

Work more hours ☐
Spend savings ☐
New job ☐
Borrow money ☐

11. How do you feel about your husband's temporary loss of work? (Check one or more)

Anxious ☐
Angry ☐
Depressed ☐
Threatened ☐
None of the above ☐

12. After the heart attack, do you think your husband's physical strength is:

Stronger ☐
Weaker ☐
Same ☐

13. Do you think he could tolerate presently the same amount of physical activity he was performing prior to the heart attack?

Yes ☐
No ☐

14. Most wives have mixed feelings about their husband's temporary change in strength. Do you feel (Check 1 or more)

Angry ☐
Depressed ☐
Threatened ☐
Anxious ☐
Relieved ☐
None of the above ☐

15. If you do feel your husband's strength is weaker, do you feel a sense of loss about his lost strength?

Yes ( )
No ( )

If you answered yes, check one below:

Slight sense of loss ( )
Great sense of loss ( )
Very great sense of loss ( )

16. In the future, I want him to be as strong as he was before the attack.

Don't care ( )
No ( )
Yes ( )
Very much, yes ( )

Please answer the next six questions if you and your husband were engaging in sexual relations before his heart attack.

17. In the future, I think this heart attack will change our sexual life together.

Strongly disagree ( )
Slightly disagree ( )
Slightly agree ( )
Strongly agree ( )

18. I feel unhappy about the lack of physical sexual relations with my husband presently.

Strongly disagree ( )
Slightly disagree ( )
Slightly agree ( )
Strongly agree ( )

19. I feel a sense of loss due to our lack of sexual relations.

Don't care ( )
No ( )
Yes, a little ( )
Yes, very much ( )

20. In the future, do you think you will feel as free to express your sexual drives to your husband as you did before his heart attack?

Yes ( )
No ( )

21. In the future, do you think your communication to your husband of your sexual drives will be

Decreased ( )
Same as before ( )
Increased ( )

22. Do you think you will be afraid when you resume your normal sex life with your husband?

Yes ( )
No ( )

23. During my husband's hospitalization, I feel I have temporarily lost a valuable friend and companion.

Yes ( )
No ( )

24. I long for more understanding and support from my husband.

Strongly disagree ( )
Slightly disagree ( )
Slightly agree ( )
Strongly agree ( )

25. During this period of hospitalization, have you felt

More emotionally close to your husband ( )
No change ( )
More emotionally distant from your husband ( )

26. Is this hospitalization a stress on your marriage presently?

Yes ( )
No ( )

If yes, please explain ______________________________

____

____

____

27. Do you feel you love your husband more or less now than before the attack?

More ( )
Less ( )
No change ( ) Explain any answer you

selected: ____________________

____

28. I feel afraid to share my real feelings with my hsuband because it would be a strain on him.

Never ( )
Seldom ( )
Often ( )

29. I would like to express all my feelings to my husband about his hospitalization.

Never ( )
Seldom ( )
Often ( )

30. Do you feel inhibited in what you say to your husband now due to his recent heart attack.

Never ( )
Seldom ( )
Often ( )

31. Who are you receiving understanding and support from now?

Family ( )
Friends ( )
Ministers ( )
Husband ( )
Doctors ( )
Nurses ( )
No one ( )

32. Some wives feel a sense of loss in some areas of their marital relationship. Which area has affected you the most?

Loss of financial security ( )
Loss of husband's physical strength ( )
Loss of physical sexual relations ( )
Loss of open, free communications ( )
Loss of feeling of emotional closeness ( )

33. What do you feel you need most that we could help you with?

PHYSIOLOGICAL INSTRUMENTS

Cardiovascular System

Instrument: Blood Pressure Transducers and Sphygmomanometer

Variable: The variable to be measured is pressure in the cardiovascular system. Pressure is defined as force per unit area. The units of pressure are usually expressed in terms of millimeters of mercury (mm. Hg.) or centimeters of water (cm. H_2O).

Parameters: The instrument is used with some kind of recording system such as a polygraph or an oscilloscope. (The polygraph is described elsewhere in this compilation.) The range of pressure that can be measured depends upon the kind of transducer used. With the appropriate transducer either high or low pressures can be measured, which range from low values near 0 mm. Hg. to high pressures such as those found during peak systolic pressure during the cardiac cycle.

The research question will determine whether indirect or direct measurement is needed. For example, if continuous measurement of arterial pressure is required while a pressor drug is being infused intraveneously, the direct method is more appropriate. Conversely, if intermittent measurements are needed, then the sphygmomanometer is the more appropriate choice. For example, intermittent measurement of blood pressure may be required during stress testing.

Research Application: These instruments can be used to measure direct pressures in many situations and therefore have a wide range of applications. For instance, pulmonary arterial and capillary wedge pressure can be measured with new types of nursing interventions. Another application is monitoring of patients with cor pulmonale. Following neurosurgery, catheters may be inserted to measure cerebral spinal fluid (CSF) pressure. The researcher may want to monitor those activities that alter CSF pressure.

Indirect intermittent recording by the sphygmomanometer is a better way of measuring blood pressure when invasive techniques are not indicated.

Description: The blood pressure transducer converts mechanical energy (pressure) to electrical energy. The electrical signal can then be amplified and recorded by such an instrument as a polygraph.

A catheter or large needle is attached to the transducer. The catheter is then filled with heparinized saline and inserted into a blood vessel.

Care must be taken in handling these instruments as they are delicate and easily damaged. A certain amount of skill is required to properly select and use the instrument. These instruments are available commercially and are standard items in a physiology laboratory.

Comments: The transducers must be calibrated before each use. They are accurate to approximately 1 percent error. In contrast, the sphygmomanometer is less accurate, but because it involves a noninvasive technique, it is the instrument of choice in many situations.

Instrument: Electrocardiograph

Variable: The phenomenon being measured is the electrical activity of the heart.

Parameters: Like other excitable tissues, heart muscle cells have the capability of generating electrical responses to stimuli. These responses are called action potentials. Action potentials generated in the sino-atrial (SA) node are conducted to all parts of the heart. When the large masses of muscle cells in the atria and ventricles generate action potentials in a more or less coordinated fashion, the electrical activity can be recorded from surface electrodes on the arms, legs, or chest wall.

The actual variable being measured is the electrical potential (voltage) difference between two electrodes. Potential difference is measured in volts or millivolts by a galvonometer or voltmeter.

Research Application: The electrocardiograph is primarily a clinical tool used for the assessment of electrical activity of the heart. It records the pattern and rhythm of the electrical action of the heart. An investigator skilled in "reading" ECG recordings may assess the rhythmicity of the heart, the effects of electrolyte disturbances on the pattern and waveforms produced, the presence of damage to the myocardium, and whether there is hypertrophy of the myocardium. The instrument is used for clinical diagnosis and for monitoring purposes.

In healthy individuals, the electrocardiogram remains reasonably constant, even though the heart rate changes with the demands of the body. Under pathological conditions, several changes may occur in the ECG. These include: (1) altered paths of excitation on the heart, (2) changed origins of waves (ectopic beats), (3) altered relationships of features, (4) changed magnitudes of one or more features, or (5) differing durations of waves or intervals.

Description: The instrument amplifies and displays the electrical potentials generated by the heart with respect to time. The graphic record of the potentials produced by an electrocardiograph is called an electrocardiogram and is abbreviated ECG or EKG (from the German *electrokardiogram*).

A basic electrocardiograph consists of several electrodes that are attached to the skin, a differential amplifier, and a means of displaying and/or recording the electrocardiogram. The electrodes detect the electrical potentials on the surface of the skin due to the action potentials of the heart, and the differential amplifier amplifies the difference in potential detected by these electrodes.

The amplitudes, polarities, and timing of the various features of the ECG are dependent to a large extent upon the location of the electrodes on the body. The standard location for clinical electrode placement are on the left and right arms near the wrists, the left leg near the ankle, and several locations on the chest, called the precordial positions. In addition, a reference electrode is usually placed on the right leg near the ankle. Each set of electrode locations from which the ECG is measured is called a "lead."

There are twelve leads, or standard lead configurations, used in clinical electrocardiography, and each has a unique characteristic waveform. The three most basic configurations are the "limb leads," and are as follows:

1. Lead I: The difference of the electrical potential at the left arm (LA) minus the potential at the right arm (RA).
2. Lead II: The difference of the electrical potential at the left leg (LL) minus the potential at the right arm (RA).
3. Lead III: The difference of the electrical potential at the left leg (LL) minus the potential at the left arm (LA).

In most clinical electrocardiographs, the potentials produced by the 12 leads, or lead configurations, are measured one at a time and are selected by means of a selector switch on the instrument.

An electrocardiograph that has been designed for monitoring purposes usually has fewer leads and utilizes a cathode ray tube (CRT) for a visual display of the ECG. Often, a strip chart recorder is also used in conjunction with the CRT.

The electrocardiograph's major use is to monitor the amplitude and rate of a patient's ECG. Most instruments have an attachment that will alert personnel with an audible alarm if the heart rate becomes erratic or slower or faster than the preset limits.

In addition to the basic components described above, a modern electrocardiograph must have several additional features for protection of the patient and the instrument. Patient safety is most important, of course, because external electrical instruments can induce lethal currents into the patient's body. Just as electrical currents produced by the nervous system cause the heart muscle to contract and pump blood, currents from external sources that are allowed to pass through the heart can cause a disruption of the normal heart operation, possibly resulting in fibrillation or complete heart failure. To reduce this threat, circuitry is added to reduce the possibility of current flow through the patient.

Circuitry must also be added to protect the instrument if it is to be used during surgery in conjunction with high frequency electrosurgical devices, and to protect it from the extremely high voltages produced by defibrillators.

Comments: The electrocardiograph is probably the most widely used of all biomedical electronic instruments. It provides a dynamic indication of how well the central human organ is performing in almost every aspect. When it is combined with pulse, blood flow, and pressure information, the clinician has an almost complete picture of a patient's cardiodynamics.

Instrument: Phonocardiograph

Variable: Sounds of the heart and large blood vessels are the variables measured by this instrument.

Parameters: The instrument is capable of graphically representing heart sounds recorded from the surface of the body. It is a specialized instrument ordinarily used to supplement an electrocardiogram. Phonocardiography is related to what the investigator would hear in an ordinary stethoscope, but it has the advantage of providing a permanent visual record of events. It also makes possible the accurate timing of sounds and events that are too rapid or too subtle to be discerned by human senses. Although the instrument is most useful in detecting heart murmurs, it has limitations in detecting the soft, high-pitched murmur of aortic insufficiency.

Research Application: The phonocardiograph is widely used as a teaching/learning device for training and disciplining the senses of sight, touch, and hearing. Also, because the instrument provides a permanent readout of heart sounds, the information can be used for making comparisons over time.

The instrument is particularly useful in displaying murmurs of the heart. The acoustic events of the heart are made up of both tones and noise and can be divided into two categories: heart sounds and heart murmurs. Heart sounds have a transient character, are of short duration, and, in general, are induced by a sudden displacement of blood or the opening and closing of valves. Heart murmurs have a noisy character, last a longer period of time, and are caused by the turbulence of the blood flow in the heart and large vessels.

Heart sounds and heart murmurs are usually characterized by three properties: frequency, amplitude, and quality. These properties can be analyzed visually if the heart sounds and murmurs are converted into electrical impulses and recorded on paper via a phonocardiograph or acoustically if the sounds are perceived by the human auditory system.

Description: The sounds that originate in the heart and large blood vessels may be detected, converted into electrical signals, and recorded using a special instrument—the phonocardiograph. The record so obtained is called a phonocardiogram (PCG). For the purpose of referencing the heart sounds and murmurs to the cardiac cycle, the phonocardiograph is usually capable of simultaneously recording one other cardiac event, the electrocardiogram (ECG).

In addition to the reference recording, the basic phonocardiograph is composed of a microphone, amplifier, filtering circuitry, and some means of displaying and recording the waveforms. The function of the microphone is to convert variations in the pressure of sound waves into electrical energy; so it is important that the microphone maintain good contact with the skin. This contact can be achieved by equipping the microphone with an adhesive strap or harness and may include a suction cup from which air can be exhausted by a handbulb. It is also important that the microphone be as insensitive as possible to environmental noises. This can be accomplished by making the microphone directional, acoustically insulating it from the environment, and/or using the phonocardiograph in a sound-proofed room.

The amplifier consists of electronic components that increase the amplitude of an electrical signal presented by the microphone. It must provide a uniform amplification over the entire frequency range. Usually, the amount of amplification or gain is adjustable.

The vibrations initiated by the heart are usually a composite of high and low frequencies; each of these frequencies usually varies greatly in amplitude. The higher frequencies are as important as the lower frequencies for diagnostic information about the heart, but, as a rule, the lower frequency waves are produced and propagated to the surface of the body in greater amplitude than are the higher frequency waves. Consequently, if the heart sounds and murmurs were only amplified and displayed, the relatively small high-frequency waves that were superimposed on the large amplitude low-frequency waves would be unreadable.

Because of this, phonocardiographs usually employ a number of high pass filters with different cutoff frequencies. The particular filter selected depends on which frequencies one desires to pass. In this way, the high-amplitude lower frequencies can be attenuated, and the gain of the amplifiers can be adjusted to allow measurement and interpretation of the higher frequencies.

The final component of the phonocardiograph is the recorder. This is usually a multichannel high-speed recorder or an oscilloscope with a camera attachment for permanent records. One channel is used to record the reference ECG and the other channel is used to record the PCG.

Comments: Phonocardiograms are not a substitute for the ear or the hand. However, phonocardiography is a useful device for training and disciplining the senses of sight, touch, and hearing, for it allows one to analyze graphic representations in terms of what is seen, felt, and heard, and to correlate that data.

Instrument: Vectorcardiograph

Variable: The summed electrical activity of myocardial cells is the variable being measured.

These electrical potentials generated by the heart cause patterns of electrical potentials at the surface of the body. As the electrical potentials propagate through the heart, the surface electrical potentials change. If suitable electrodes, amplifiers, and an appropriate display device are utilized, these surface potentials can be detected and observed externally.

Parameters: A vectorcardiograph (VCG) is similar to an electrocardiograph (ECG/EKG) in function. Both utilize similar circuitry, electrodes, amplifiers, and display devices to present visually the surface potentials related to heart actions. The major difference between the two devices is how these surface potentials are presented.

An electrocardiograph displays the surface potentials as an amplitude variation in the vertical direction and time as an amplitude variation in the horizontal direction on the display device. In other words, as time increases, the paper in a strip chart recorder or the electron beam of a cathode ray tube (CRT) oscilloscope moves linearly in a horizontal direction, while variations in the surface potentials being detected by the electrodes move the stylus or electron beam up or down. The resulting waveform is the ECG pattern familiar to clinicians.

The vectorcardiograph (VCG) displays the surface potentials detected by one set of electrodes as an amplitude variation in the vertical direction as does an electrocardiograph, but the horizontal position of the resulting waveform is determined by the amplitude of the surface potential between a second pair of electrodes. The display presented by a vectorcardiograph is usually two or three closed loops that originate from the same point on the display.

There are a number of different electrode configurations commonly used that result in different VCG and ECG waveforms. Each waveform provides information about different aspects of the heart.

The ECG is more useful for monitoring purposes and for determining the time relationships of different events related to heart function such as the heart rate. However, the VCG provides a better method of determining the amplitudes and shapes of the various events of the heart cycle. Because the vectorcardiograph is more expensive and more difficult to use than the electrocardiograph, its use is of necessity currently limited primarily to large medical centers.

Research Application: Investigators will find the vectorcardiograph capable of providing more and different information about heart function than that provided by the electrocardiograph. The VCG visualizes three angles of the heart function; this provides much information about the operation of the heart. Certain abnormal conditions, such as posterior myocardial infarctions, can be readily detected by this instrument. It is also superior to the ECG in displaying small beat-to-beat changes in the rate of depolarization and repolarization of the heart.

Description: In a vectorcardiograph, the surface electrical potentials, which represent electrical potentials present in the heart, are detected by a number of electrodes, amplified and displayed, usually on a cathode ray tube (CRT) oscilloscope.

There are three primary waveforms that provide three electrical "views" of the heart. By properly placing the electrodes of a vectorcardiograph on the subject's body, the surface electrical potentials can be added together and will present a picture of the loop representing the heart's potentials. The loop is closed and three-dimensional, representing the changing electrical potential of the heart over one complete cardiac cycle. Some of the more expensive vectorcardiographs actually simulate a three-dimensional display of the loop on a CRT oscilloscope. Most instruments, however, actually display the projection of the loop on three perpendicular planes. This is actually three two-dimensional views of the loop as viewed from the front, side, and top. The front view is the loop as projected on a vertical plane parallel to the

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front of the subject and is called the frontal plane projection. The side view is the projection of the loop onto another vertical plane parallel to the side of the subject and is called the sagittal plane. The top view is the projection onto a horizontal plane and is called the horizontal plane.

Comments: The vectorcardiograph (VCG) is a highly specialized, expensive instrument that requires a skilled person to interpret its waveforms. In addition, the important time durations and intervals related to the QRS, PR, and QT portions of the cardiac cycle, which contain a considerable amount of diagnostic information, are difficult to determine.

Instrument: Ultrasonic Blood Flow Meter

Variable: Blood flow is the variable determined by this instrument. The units of flow are usually measured in liters per minute (l./min.), milliliters per second (ml./sec.) or milliliters per minute (ml./min.), i.e., volume/time.

The ultrasonic blood flow meter does not actually measure flow, but rather the velocity of flow. If the cross-sectional area of the lumen of the blood vessel is known, the actual flow can then be calculated. Flow (Q) is equal to the product of velocity (V) times cross-sectional area (A). Thus, $Q=V \cdot A$.

Parameters: There are two techniques of using ultrasound for measuring the velocity of blood flow. The first is invasive and requires placing a flow probe from the instrument around the blood vessel within which the investigator wishes to determine flow. The second technique is noninvasive and can be used to measure velocity in blood vessels near the skin surface. In this latter case, the flow probe is coupled to the skin with an aqueous jelly to facilitate the transmission of ultrasonic waves. Because the cross-sectional area cannot be determined in this latter instance, only velocity of flow and not the flow itself is measured. At present, the invasive technique has only limited application for human subjects.

Research Applications: The invasive technique is quite useful in animal models. For example, if the investigator wishes to monitor cardiac output, the flow probe is placed around the pulmonary artery, as the entire cardiac output passes through the pulmonary artery each minute. Thus, cardiac output can be monitored continuously under a variety of changing conditions, such as during stressful stimuli, after administration of certain kinds of drugs, or with different kinds of assisted ventilation. Flow to a specific organ may also be monitored by placing the flow probe around the artery that supplies that organ.

The noninvasive technique may be used with human subjects for monitoring velocity of flow in vessels that are partially closed by a thrombus or in the carotid arteries after carotid endarterectomy. The probe may also be used to measure systolic pressure in situations in which the arterial blood pressure is too low to be monitored with a sphygmomanometer and stethoscope.

Description: The main part of the instrument consists of an amplifier and a display usually contained in a metal box. The flow probes are electrically coupled through cables to the input portion of the box. The probe itself consists of an ultrasonic transmitter and a receiver. The transmitter generates ultrasonic waves that reflect off the blood cells and return to the receiver. For determining velocity, the ultrasonic flow meter utilizes the Doppler effect; i.e., when a sound wave strikes a moving object, its frequency will be changed by an amount proportional to the velocity of that object. Thus, frequency will be increased if the blood cells are moving toward the transmitter and will be reduced if the blood cells are moving away from the transmitter.

Comments: For direct measurement of blood flow, the investigator must possess or develop some surgical skills in order to position the probe without damaging the blood vessels.

General Body Systems

Instrument: Absorption Spectrophotometer

Variables: The absorption spectrophotometer is used to determine the concentration of solutes in solutions. It is especially useful for determining the concentrations of solutes in body fluids such as plasma, urine, and gastric juices. Spectrophotometry can determine concentrations of so many substances found in body fluids that an exhaustive list is beyond the scope of this narrative. However, examples include: amino acids, bilirubin, blood urea nitrogen (BUN), calcium, creatinine, enzymes, glucose, many drugs, etc.

Parameters: To determine the concentration of any substance in a solution, one must be able to *detect* the presence of the substance in the solution and to *generate a signal* that is proportional to the concentration of the substance being detected. To detect the substance, one must be able to make it "visible." The substance may be rendered "visible" by reacting it with a chemical that will produce a colored solution or that will change the character of the solution. The absorption spectrophotometer converts the signal generated (a change in light intensity) to an electrical signal that can be amplified and used to operate a recording device or display such as a chart recorder, ammeter, or digital display.

The principles of operation are the same for all absorption spectrophotometers. Energy in the form of light (usually ultraviolet or visible) is passed through the sample being analyzed. Some of the light is absorbed as it passes through the sample. The amount of light absorbed is proportional to the concentration of the solute in the solution. If the solute does not absorb light or cannot be made "visible," then a different method must be used to determine the concentration of that particular solute.

Research Application: The spectrophotometer can be used in any research application where concentration of solutes must be determined. For example, the investigator may wish to determine creatinine or BUN concentrations to assess renal function or to determine bilirubin concentrations to assess liver function.

Description: The basic model of an absorption spectrophotometer is shown in figure 1. Light of a specific wavelength is generated by the spectrophotometer and passes through the sample of fluid being analyzed. Light is absorbed as the beam passes through the sample. The amount of light that is absorbed depends on two factors: (1) the concentration of the solute in the solution, and (2) the distance or thickness of solution through which the light must travel. The greater the concentration and/or the greater the thickness of the solution, the more light will be absorbed. Most spectrophotometers pass the light beam through a tube (cuvette) and hence, through a sample of constant thickness. Therefore, the only variable that affects the light absorption is the solute concentration.

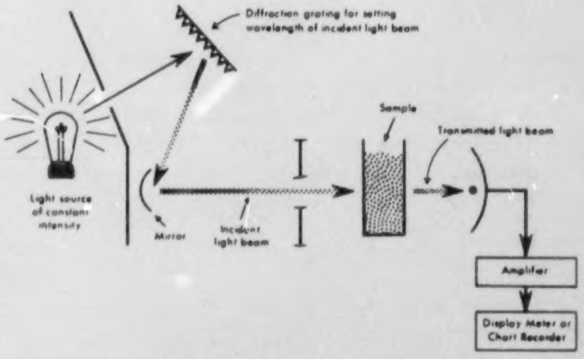
Diffraction grating for setting wavelength of incident light beam
Sample
Transmitted light beam
Light source of constant intensity
Mirror
Incident light beam
Amplifier
Display Meter or Chart Recorder

Figure 1.—Model of an absorption spectrophotometer

The amount of light absorbed can be expressed two ways: absorbance (A) or percent transmittance (=T). Absorbance is defined as:

$$A=\frac{\log}{I}I_0=a\cdot b\cdot c, \qquad (1)$$

(Beer's Law)

where I_0 is the intensity of the incident light, I is the intensity of the transmitted light, a is a constant, b is the thickness of the sample (usually constant), and c is the concentration of the solute in the sample. Percent transmittance (%T) is defined as:

$$\%T=\frac{I}{I^{\circ}}\text{ x }100. \qquad (2)$$

Also

$$\frac{\log I}{T}+A=a\cdot b\cdot c. \qquad (3)$$

Most chart recorders display the results in terms of %T, while meters most often display both %T and absorbance. The concentration of solute in the sample is a direct function of absorbance and an exponential function of %T. See the graphs showing these relationships in figure 2.

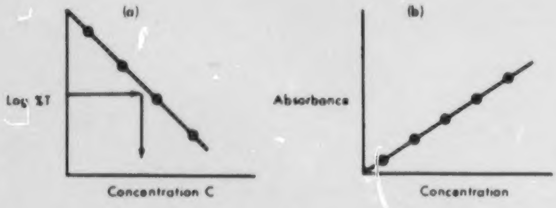

Figure 2.—Graph showing relationship of functions

To use the spectrophotometer for the analysis of solute concentration, the investigator should prepare or purchase a series of solutions of known concentration called "standards." These standards should be read in the spectrophotometer and the %T or A recorded. The %T or absorbance obtained from these standards should then be plotted graphically as shown in figure 2. The samples containing the unknown concentration of solutes ("unknowns") should then be read and the %T or A recorded. Following that step, the concentration of the solute in the "unknown" samples should be determined by graphic analysis (see figure 2).

To ensure accuracy, the wavelength of the incident light must be set by adjusting the angle of the diffraction grating so that maximum absorbance (minimum %T) is obtained for the determination of the concentration of a particular solute.

Comments: An instrument very similar to the spectrophotometer is the absorbance-filter colorimeter. The main difference between the colorimeter and spectrophotometer is that in the colorimeter a filter of colored glass replaces the diffraction grating. The colorimeter is usually much less expensive than the spectrophotometer, but it is not nearly as versatile an instrument.

Instrument: Centrifuge

Variable: A centrifuge does not measure anything in and of itself. It is an instrument that is used to separate solids and suspended particles from an aqueous mixture. One of the main uses of a centrifuge is to separate blood cells from plasma.

Parameters: There are many kinds of centrifuges. They range from the ultracentrifuge, which is used to separate different kinds of high molecular weight compounds (e.g., proteins), to the bench centrifuge, which is used to separate red blood cells from plasma. The discussion that follows concerns the use of the common bench centrifuge.

Research Application: A bench centrifuge is used most often to separate red blood cells from plasma. The plasma can then be used as a sample of extracellular fluid and can be analyzed for the concentration of such substances as electrolytes, glucose, creatinine, bilirubin, proteins, and hormones. These analyses are often done using a spectrophotometer. The volume of the blood sample can be measured; after centrifugation, the ratio of the volume of red blood cells to total blood volume in the sample (i.e., hematocrit) can then be calculated. These kinds of determinations are very useful in many kinds of research. Knowledge of solute concentrations in plasma are absolutely essential for research in areas involving renal function, metabolism, and endocrine function. Hematocrit and changes in hematocrit are essential for research on pathophysiological problems that involve blood, fluid balance, etc. The centrifuge is the tool that allows these kinds of data to be collected.

Description: Blood is placed into heparinized tubes that are placed in the centrifuge. The tubes should be counterbalanced to prevent vibration and excessive wear on the rotor bearings. When the centrifuge is turned on, the blood is accelerated from 11,000 to 13,000 revolutions per minute (rpm) (a force of 5 to 11 times normal gravity (g)) for a period of 5 to 10 minutes. The tubes are then removed from the centrifuge, measurements of the hematocrit are made, and/or the plasma is removed for analysis.

If the value of only the hematocrit is needed, the blood can be placed in a constant bore heparinized capillary tube. The tube is then sealed with clay and centrifuged in a manner similar to that described above. After centrifugation, the length of the column of red cells is measured. That length is then divided by the length of the whole column of separated blood, as the radius of the tube is constant. The ratio of lengths is directly proportional to the ratio of volumes.

Comments: One word of caution is appropriate. The hematocrit values calculated using the method described above tend to be overestimations because some platelets and white blood cells are trapped in the red blood cell layer. However, if sufficient centrifugal force, as described above, has been used, the values are higher than the true values by only 1 or 2 percent.

Instrument: Flame Photometer

Variable: The flame photometer is used to measure the concentrations of sodium (Na^+) and potassium (K^+) in body fluids and other solutions.

Parameters: The flame photometer is a type of emission spectrophotometer. It is used most often to determine the concentrations of Na^+ and K^+ in serum (or plasma), urine, and all aqueous solutions used in research. The instrument requires a gas supply and a pressurized source of filtered air. The instrument can be used on a bench or countertop in the laboratory, but not on counter shelves, as the hot gases that rise from the chimney could start a fire. It should also be noted that this method for determining the concentration of Na^+ and K^+ is very sensitive. Small samples of plasma or urine are used and usually must be greatly diluted to be used in the flame photometer. The investigator should avoid smoking while determining K^+ concentrations, because smoke contains so much K^+ that even small amounts will penetrate the flame and introduce sizable errors in the determination.

Research Application: Flame photometry is a widely used and reasonably simple method for measuring the concentration of Na^+ and K^+ in aqueous solutions. It can be used to measure changes in Na^+ and K^+ concentration in plasma before, during, and after intravenous fluid therapy with postsurgical and other kinds of patients. It is often used to measure the concentrations of Na^+ and K^+ after dehydration, in acid-base disorders, during the menstrual cycle in women of childbearing age, etc.

Description: The flame photometer is an emission spectrophotometer. The sample to be measured is placed into an intake tunnel and is aspirated and atomized by an air flow. The atomized solution is then heated in a gas flame. Heating Na^+ and K^+ causes the ions to emit energy in the form of light, which is detected by a photodetector. The amount of light liberated when the solution is heated is directly proportional to the concentration of Na^+ or K^+ in the solution. (See figure 3 for a block diagram of the flame photometer.)

The instrument must be calibrated, and a standard curve made in order to determine the concentrations of Na^+ and K^+ (see figure 4).

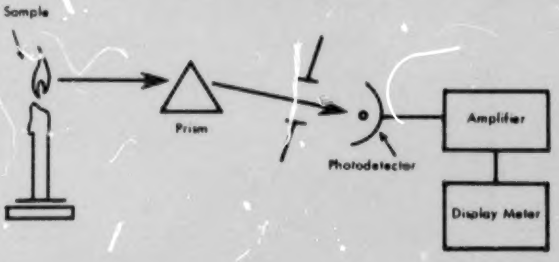

Figure 3.—Block diagram of flame photometer

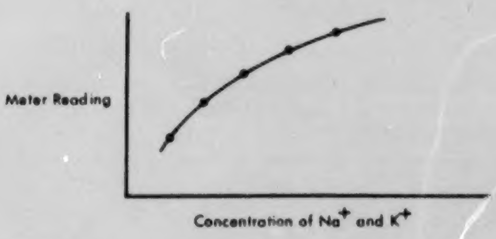

Figure 4.—Standard curve for determining concentrations of Na^+ and K^+

Comments: The flame photometer is a commercially available instrument used in clinical and research laboratories. Many are equipped with automatic sample changers. The cost of the instrument increases directly with the amount of automation with which it is equipped.

Instrument: pH Meter

Variable: The variable measured is the pH of aqueous solutions. The pH of a solution is an index of the acidity or alkalinity of the solution. A solution's pH can vary from 0 to 14, with a pH=7.0 defined as neutral. A pH of less than 7 is considered acid, while a pH greater than 7 is considered alkaline. A solution's pH is an exponential function of the concentration of hydrogen ions in that solution. Mathematically, $pH=\log_{10} 1/[H+]$.

Parameters: A pH meter can be used to measure the acidity or alkalinity of any aqueous solution. Because body fluids are aqueous solutions, a pH meter can be, and often is, used to measure the pH of these fluids. The pH of body fluids varies from one body fluid compartment to another and sometimes varies within the same compartment. For example, the pH of normal arterial blood is approximately 7.4, while the pH of normal venous blood is about 7.35. Urine pH can vary from as low as 4.4 to as high as 7.8. Conversely, gastric juice has a pH that varies from 1 to 3, while ileal chyme may have a pH near 8.0.

Research Application: Examples of situations in which a pH meter can be useful to a researcher include: measuring the pH of gastric juices aspirated via a nasogastric tube, measuring urinary pH after the treatment of acid-base disorders, measuring urine pH in subjects on special diets, etc. In the laboratory, the pH meter is used to measure the pH of buffered solutions to be used for enzymatic reactions such as glucose oxidose in the determination of plasma glucose, and buffered solutions used for electrophoresis of proteins, etc. The pH meter is a very important research tool.

Description: A pH meter is a device with a glass electrode that converts ionic potentials into electronic potentials. When the glass electrode is immersed in a solution containing hydrogen ions, an electrical potential is generated across the thin, glass, semipermeable membrane (one which allows only passage of hydrogen ions). In practice, the glass electrode is composed of a bulb of special glass fused to the end of a tube of ordinary glass. The inside of the bulb contains a solution of known pH that is in contact with a metal electrode. The glass electrode and another reference electrode are placed in the solution to be measured. It is the potential between the two electrodes that is measured and expressed as pH.

The electrodes used for pH measurement are polaragraphic-type electrodes. The reference electrode, which is a calomel electrode, has a minimal electrode potential to provide a stable reference. The pH electrode is a glass electrode incorporating a special hydrogen-ion-sensitive glass in the measuring region. This special glass allows hydrogen ions to permeate the glass membrane and thus develop an electrode potential between the measuring and reference electrodes.

As in any chemical measurement, temperature is important for accuracy, and all pH control units provide a means of compensating for temperature.

The electrical impedance of these electrodes is extremely high, and it is for this reason that a special measuring instrument must be used with them.

There are instruments available with a single range of from 0 to 14, as well as instruments with expanded ranges for greater accuracy and resolution if needed.

As the potentials developed by the hydrogen ions represent a basic measurement, it is generally possible to interchange one manufacturer's electrode with another manufacturer's control unit as long as the electrical connections are compatible. It is important that the researcher be aware that there is an extremely broad range of electrode configurations available commercially.

Although there are some rugged and maintenance-free electrodes available for industrial applications, the normal electrodes used in a laboratory or medical environment are very fragile and require periodic maintenance. Instructions are usually provided with the electrodes, which describe the saturated-salt solutions that must be used in each electrode to provide the interconnection between the measuring point and the electrical circuit.

Because of the very high electrical impedance of these types of electrodes, difficulties can be encountered if measurements must be made in strong electrical fields. Such fields can produce artifacts or erroneous readings.

Comments: Commercially available pH meters range in price from under $100 to approximately $1,000. Normally, one can expect to find that the stability, accuracy, resolution, and the ease of readout of the instrument are directly proportional to the price.

In some body fluids such as gastric juices, there can be very wide ranges in the pH, and a relatively inexpensive instrument may be suitable. However, if one is looking for subtle differences in blood, it may be necessary to have one of the more expensive, precise instruments, in order to determine the small changes in pH that can be very significant.

Instrument: Polygraph

Variables: The polygraph is a general purpose recorder that can be used to make permanent recordings of many variables including pressure, force, temperature, flow, and electrical events such as the electrocardiogram (EKG), the electromyogram (EMG), and the electroencephalogram (EEG).

Parameters: Polygraphs can be used to record such a variety of different variables that they are an essential tool in any research laboratory that records biophysical variables. In general, polygraphs amplify and record weak biophysical signals. These instruments are used in conjunction with a variety of detectors, which are either electrodes or transducers. (See the description of the blood pressure transducer elsewhere in this compilation.) Transducers convert mechanical energy or events into electrical signals that can be amplified and recorded. The transducers are connected directly to the preamplifier input circuits of the polygraph as shown in figure 5. As many different kinds of transducers can be used with a polygraph, the investigator needs only one multichannel polygraph in order to record a variety of different kinds of biophysical signals.

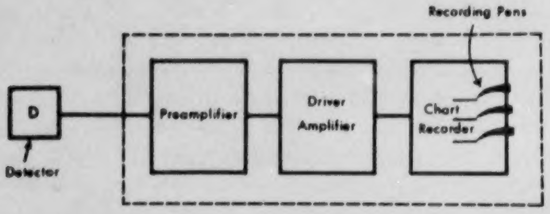

Figure 5.—Block diagram of a polygraph

Research Application: Because the polygraph is a general purpose instrument, it has a broad variety of applications. With the appropriate transducer, the polygraph can be used to record such pressures as arterial blood, pulse, central venous, pulmonary capillary wedge, ventricular and atrial pressures during the cardiac cycle, and cerebral spinal fluid (CSP). With an integrator circuit, polygraphs can be used to record blood and gas flow. Used with a force transducer, it can be used to record muscle tension. With electrodes, the polygraph can be used to record electrical activity in the heart, brain, or muscles. Intracranial (CSF) pressure can be recorded during various kinds of activities in postoperative neurosurgical patients. It can also be used to determine cardiac output in patients who are being treated for a variety of illnesses.

Description: The polygraph comes in a variety of sizes, shapes, and price ranges. It usually consists of an amplifier section and a chart recorder section, both housed in the same cabinet. The amplifier section is subdivided into preamplifier and driver amplifier sections. Transducers are coupled to the preamplifier. The preamplifiers may be specialized for recording specific variables, e.g., the ECG, or the electronic integration of specific signals. The driver amplifier receives the amplified signals from the preamplifier and further intensifies the signal strength in order to drive or move the recording pens (oscillographs). The pens record the signals produced by the transducer on paper for a permanent record. (See figure 5 for a block diagram of this instrument.)

The polygraph includes those components within the dashed lines. The detector (transducer or electrodes) are connected directly to the preamplifier portion of the polygraph.

Polygraphs have a timer pen that makes a mark each second for a time base. A signal marker is also available on most polygraphs to mark or signal both the time and duration of specific events or stimuli. They may have from 2 to 12 channels for simultaneous recording.

Comments: These instruments are available commercially; cost depends on both the quality and number of channels needed. Although polygraphs appear to be quite complex (and often are), they are not difficult to learn to use. An investigator can learn to use and balance a polygraph in 2 to 3 hours. Because polygraphs record so many kinds of variables simultaneously, they are one of the most useful instruments used in a physiological research laboratory.

Instrument: Thermistor Temperature Probes

Variable: Body temperature is the variable being measured.

Parameters: Both core and surface temperatures can be measured by this instrument. Core temperature is accurately regulated and in "healthy" persons does not vary from mean reference values by more than 1° Fahrenheit (F.) or 0.6° Centigrade (C.). Surface or skin temperature does rise and fall because that is a function of the operational variables that promote heat production or heat loss. These operational variables include such factors as metabolism, environment, age, and sex.

The instrument is useful in measuring core or internal temperature in orifices of the body such as the mouth, ear, rectum, or vagina. Surface or skin temperatures can also be measured, but a special flat probe must be used to ensure that the instrument will be insensitive to ambient air.

Research Application: The inside temperature of the body remains almost exactly constant except when a person develops a febrile or a hypothermic condition. These conditions can stem from abnormalities in the preoptic area of the anterior hypothalmus, toxic substances affecting the hypothalmus, trauma, bacterial organisms, and a variety of other factors. Depending on the cause, the body temperature can ascend or descend rapidly within a few hours or over a period of days. As impulses affecting body temperature are received by the hypothalmus, control or thermostatic regulation processes begin. These processes have a direct relationship to the surface temperature, which is controlled by a feedback mechanism that regulates the body's rate of heat loss and heat production.

Description: Transducers for measurement of this variable are constructed of materials that have a high negative temperature coefficient of resistance and are generally known as "body temperature probes." They are available in many configurations and are manufactured to very tight tolerances, which allows each "series" of probes to be interchanged with a single control unit without the need for individual calibration of each probe.

Thermistor temperature probes are used with a control unit that has been especially designed to match the transducer and to linearize its variations with respect to temperature. The control unit measures and converts the electrical resistance of the probe to a meter reading that is calibrated directly in degrees Fahrenheit (°F) or Centigrade (°C).

It is important to allow sufficient time for making accurate measurements with all temperature-measuring devices. When probes are first placed into position, they momentarily lower the temperature of the surrounding area. For equilibrium, it is necessary to allow time for the body area to return to its "pre-probe" temperature and to allow time for the probe itself to equilibrate with its surrounding temperature. The time required for such recovery is approximately 7 to 10 seconds. After that time, the unit will faithfully follow body or skin temperature changes.

Another instrument that can be used to provide an electrical indication of temperature is the thermocouple. A thermocouple is made up of two dissimilar metals which, when they come in contact with each other, generate a voltage that is directly proportional to the temperature of that junction. A number of standard thermocouple materials are available. However, the voltage generated by these devices at body temperature is quite low, and the change in voltages generated within the 35° C to 45° C range is very low. Thus, these devices generally require control units that amplify the voltages in order to provide an instrument readout or a recording.

Another aspect of the thermocouple type of measurement is that it requires a "reference junction." These reference junctions are available on a commercial basis. It is no longer necessary to use an ice-bath reference, as was originally done when thermocouples were first used.

Comments: Thermistor temperature probes, a form of semiconductor material, provide excellent temperature measurements with an electrical readout at a relatively reasonable cost. They are widely used in clinics, as well as in research.

These devices are used because they provide a relatively large electrical change per degree of temperature change and also work very well at body temperature. Due to the high output of the probes with respect to temperature changes, a relatively inexpensive control unit, which can make accurate temperature measurements, is provided.

Temperature measurement devices can be used for monitoring temperature on a continuous basis. With a slightly more sophisticated control unit, they can be used to control a subject's temperature by controlling external sources of temperature control, e.g., hypothermia.

Nervous System

Instrument: Electroencephalograph

Variable: The electrical activity of the brain is the variable to be measured. This can be further defined as "the bioelectrical potential waveforms generated by central nervous system (CNS) neuronal activity." Both the intensity and patterns of this electrical activity are for the most part a result of overall excitation from the reticular activating system (RAS).

Parameters: The instrument is limited to measuring, amplifying, and displaying the electrical potentials of the brain with respect to time. The graphic record of the bioelectric potential produced by the instrument is called an electroencephalogram (EEG). Information from the EEG can be interpreted to determine levels of sleep, levels of alertness, types of epilepsy, the presence of brain tumors, etc., as well as for the measurement of disturbances in the EEG pattern from various external stimuli. The instrument is relatively expensive and requires skill in its operation and interpretation of the results.

Research Application: A form of the electroencephalograph has been on the market since 1935 and has been used in research activity since that time. The instrument has a long history of reliability. Currently, the instrument is widely used for diagnostic purposes, as well as for monitoring purposes such as determining anesthetic level during surgery. Some researchers are using the EEG as an evoked response indicator when investigating such factors as central nervous system (CNS) responses to auditory, temperature, electrical, mechanical, and/or chemical stimuli. Investigators are also using the EEG to obtain data regarding questions concerning biofeedback.

Description: EEG measurement is noninvasive for it is made by placing small surface or subdermal electrodes in clinically established, standardized locations around the subject's head. The small electrophysiological voltages that are generated (10 to 200 microvolts) are amplified by low-noise, high-gain amplifiers, which have adjustable frequency bandwidths and are recorded on a multichannel ink recorder (polygraph). A standard chart speed of 30 millimeters per second is used for the clinical EEG.

Most EEG instrumentation has the capability of recording signals received from various regions of the brain. The multichannel systems have a switching panel, or box, that allows the investigator to select any pair of electrodes for each channel of the EEG system.

Multichannel EEG systems usually number either 8 or 16 channels. A connection box to be located near the patient is often provided. The box may have a drawing of a head that shows the jacks located in the standard lead locations. EEG systems are designed to use multipen ink recorders with "fan-fold" paper, which lends itself especially well to both quick scanning of the record and storage of the record.

There are three modes of recording used in making a routine EEG, i.e., unipolar, averaging reference, and bipolar. The characteristic EEG waveforms have been categorized into EEG frequency bands or rhythms:

delta	0.5 Hz— 4 Hz
theta	4 Hz— 8 Hz
alpha	8 Hz—13 Hz
beta	13 Hz—22 Hz
gamma	22 Hz—30 Hz

Comments: In order to keep the electrode resistance low, the EEG electrodes must be properly applied. If resistance is high, the electronic system becomes very susceptible to electrical noise such as 60 Hertz power lines, and artifacts may obscure the EEG signals.

Reproductive System

Instrument: Fetal Heart Monitor

Variable: The measurement of the fetal heart rate is the variable.

Parameters: The fetal monitor is designed primarily to measure the fetal heart rate (FHR), although some fetal monitors have the capability of measuring associated maternal labor activity or uterine contraction patterns. Measurement of the FHR by direct electrocardiogram (ECG) depicts the electrical activity of the fetal heart. The direct method of monitoring the FHR is more precise, but it can be initiated only after the cervix is dilated to at least 2 or 3 cm. and after rupture of the fetal membranes. Considerable skill is required to attach the electrodes to the fetal scalp.

Indirect measurement of the FHR by ultrasound devices is based on the principle that sound waves return to the transmitting source at a slightly altered frequency if they are reflected back from a moving object. The indirect method of monitoring FHR is noninvasive and requires less skill to apply; however, because fetal agitation causes interference, the maternal ECG may be recorded instead of the fetal ECG.

Research Application: External changes, as well as internal changes, will alter the FHR throughout pregnancy. Researchers are interested in the study of FHR in a given population of normal gestating subjects, as well as the effect of controlled variables on the FHR. The effects of drugs, smoking, situational stress, and other factors on FHR, with subsequent alterations in growth and development, are only a few of the questions being raised by researchers. Monitoring of the FHR during stages of delivery has unlimited potential for study. In clinical obstetrics one of the primary uses of the fetal heart monitor to date has been identification of the degree of fetal stress associated with induced labor.

Description: Direct instrumentation of the fetal ECG is obtained with a fetal scalp electrode that was discussed above. This is a consistent method of obtaining FHR. A nonfade oscilloscope is provided to display the fetal ECG. The units are commercially available and will automatically adjust for proper sensitivity. The FHR is displayed on the digital display with a range of 30 to 240 beats per minute (bpm).

Indirect measurement of the FHR can be obtained with a variety of techniques and instruments:

1. Ultrasonic measurement or somocardiography utilizes the noninvasive external application of the Doppler effect; i.e., differences in the frequency of ultrasonic waves can be converted into auditory or visual outputs.
2. The phonotransducer amplifies FHR measured via phonocardiography. This is an external, noninvasive, harmless method of fetal monitoring. The signals are obtained by somocardiography.
3. Pressure transducers can be used to measure FHR and uterine contraction patterns either directly or indirectly. Indirect measurement of the strength of uterine contractions involves the application of an abdominal pressure transducer to measure abdominal distention. Direct measurement of uterine contractions is accomplished by the placement of an intrauterine catheter introduced through the dilated cervix. The catheter is then attached to an external pressure transducer. Again, the placement necessary for direct measurement requires a considerable amount of skill on the researcher's part.

Comments: A major limitation of electronic fetal heart monitoring during delivery is the difficulty in interpretation of the fetal heart rate-uterine contraction (FHR-UC) record. Many classifications of FHR-UC patterns have been published but there is as yet no agreement on the specific incidence of fetal acidosis associated with each ominous and innocuous pattern identified. It should also be noted that direct FHR-UC measurements are not without dangers to the fetus and the mother, and indirect measurement techniques are subject to error from a variety of sources.

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Respiratory System

Instrument: Blood Gas Analyzer and the Van Slyke Manometric Apparatus

Variables: The variables measured are the arterial pH and either the amounts of oxygen (O_2) and carbon dioxide (CO_2) in arterial blood, or the partial pressures of oxygen (PO_2) and carbon dioxide (PCO_2) in that blood. Arterial oxygen, carbon dioxide, and pH are often referred to as the arterial "blood gases." The partial pressure of a gas dissolved in a liquid is the contribution that gas makes to the total pressure of all gases dissolved in the blood. The quantity of gas physically dissolved in the blood and also the quantity of gas combined with hemoglobin are proportional to the partial pressure of the gas. The pH is an exponential function of the hydrogen ion concentration.

Parameters: The variables are usually expressed in terms of pressure—millimeters of mercury (mm. Hg.) or Torr (1 Torr=1 mm. Hg.). The average values of PO_2 and PCO_2 vary with age. For a normal 20- to 30-year-old healthy person, the partial pressure of oxygen in arterial blood varies from 95 to 100 Torr; the partial pressure of arterial carbon dioxide is approximately 40 Torr. The arterial pH in a normal adult varies from 7.37 to 7.43.

A blood gas analyzer measures the pH, PO_2, and PCO_2 of blood samples. The volume of blood required for analysis varies from a few tenths of a milliliter (ml) to 2 ml, depending on the kind of analyzer being used.

Research Application: Blood gas analysis is used in two separate but functionally interrelated ways. It is used to assess cardiopulmonary function and to determine acid-base status. Knowing the PC_2 and PCO_2 allows the investigator to determine whether or not the blood is being adequately oxygenated and whether or not CO_2 is being removed at a rate sufficient to maintain CO_2 hemeostasis, i.e., whether or not ventilation of the lungs and the gas exchange across the alveolocapillary membrane is adequate. This technique is also valuable in assessing respiratory status of patients with pulmonary disease of any kind.

When the PO_2 and PCO_2 are measured along with pH, the researcher can calculate or determine the bicarbonate ion concentration of the arterial blood, and a subject's acid-base status can be accurately identified. The effectiveness of various interventions on cardiopulmonary function and acid-base status can then be ascertained. For example, the adequacy of tracheal suctioning, postural drainage, and assisted ventilation may be assessed using blood gas analysis. New procedures and therapy for improving ventilation or treatment of acid-base disorders and respiratory diseases may be evaluated in terms of changes in arterial blood gases.

Description: There are two methods generally used for determining the amounts of O_2 and CO_2 in blood. These are: (1) the separation method using the Van Slyke manometric apparatus, in which the gases are separated from the blood and then the pressures of these gases are determined in a known volume; and (2) the acid-base method in which partial pressures are measured via PO_2 and PCO_2 electrodes. The second method is more commonly used than the first because it is simpler and much faster.

In the separation method, the blood gases are usually separated from a measured quantity of blood using a vacuum. The pressure of the mixture of gases obtained is measured manometrically, after which the CO_2 is absorbed. The pressure is again measured, the oxygen is absorbed, and the pressure of the remaining gas—nitrogen—is measured. The amount of O_2 and CO_2 may be calculated from these measurements. There are other techniques for separating the gases from the blood or for measuring the quantities of gases once separated, but they are similar to the technique just described.

The acid-base technique for measuring PCO_2 and PO_2 involves the use of three special electrodes: a pH electrode, a PCO_2 electrode, and a PO_2 electrode. These electrodes, together with amplification and readout electronics, measure the partial pressures of O_2 and CO_2 directly. This technique is probably the simplest technique for measuring the desired parameters and is the most commonly used clinical method for determination of blood gases.

Comments: The transport and interchange of O_2 and CO_2 in the blood, lungs, and tissues is one of the most basic functions of the cardiac and pulmonary systems. For this reason, blood gas analyzers are widely used diagnostically in pulmonary function laboratories and in intensive care settings.

Care must be taken in obtaining and handling the blood sample, so that the sample's pH, PCO_2 and PO_2 are not altered before being analyzed.

If the type of analyzer being used utilizes electrodes, care must be taken to protect the electrodes from damage. This is true both when operating the device and when storing it. Also, the machine must be carefully and frequently checked for accuracy against known standards. If the machine has drifted from its standard settings, it must be recalibrated.

Instrument: Oximeter

Variable: The variable measured is the percent saturation of hemoglobin with oxygen (O_2). The oxygen saturation of blood (percent saturation of hemoglobin) is defined as the oxygen content of the blood divided by the oxygen-carrying capacity of the blood multiplied by 100.

Parameters: The percent saturation of hemoglobin is independent of the concentration of hemoglobin, and is, therefore, a useful parameter for comparison of oxygenation of blood between subjects or in the same subject when the concentration of hemoglobin varies.

In a normal healthy subject breathing air, the percent saturation of hemoglobin will vary between 94 and 97 percent. Percent saturation may be reduced well below 94 percent in respiratory disease. Full saturation of hemoglobin cannot be attained while the subject is breathing air at atmospheric pressure. Generally, the partial pressure of oxygen (PO_2) of arterial blood must be in excess of 150 Torr in a healthy person to fully saturate all the hemoglobin. To achieve an arterial PO_2 of 150 Torr, the inspired gas should contain approximately 30 percent oxygen, i.e., an inspired PO_2 of about 200 Torr.

The oximeter is not as accurate for determining percent saturation of blood as more direct methods such as blood gas analysis. Thus, if precise determinations are necessary, the oximeter is not the best instrument to use.

Research Application: The oximeter is best used in conjunction with a measurement of arterial blood gases. Once a baseline has been established for percent saturation, the oximeter can be used to determine whether or not there have been changes in percent saturations related to a given procedure. It is especially useful in situations in which repeated or serial arterial blood samples are difficult to obtain or in which it is necessary to minimize invasive techniques. Because percent saturation is the only variable obtained, the oximeter is not as versatile nor as useful an instrument as a blood gas analyzer.

The oximeter can be used to measure changes in percent saturation of hemoglobin of a subject with respiratory disease after specific kinds of interventions. It may also be used to assess the efficacy of oxygen therapy in patients who are hypoxemic, to correlate changes in oxygenation with changes in respiratory patterns, to observe the effects of exercise upon oxygenation, and to measure changes in oxygenation of blood in patients with cardiac dysfunction.

Description: The oximeter is an instrument used to measure oxygen saturation of blood via nonintrusive techniques. The detector is attached to an earclip that holds a light source on one side of the pinna of the ear and two sensors on the other side of the pinna.

The function of the oximeter is based upon the light absorption properties of hemoglobin. The amount of light absorbed by the hemoglobin molecules varies with the percent of hemoglobin saturation. The determination of hemoglobin saturation is accomplished by measuring the light absorption of a transilluminated web of tissue that has a rich supply of capillaries, e.g., the pinna of the ear.

Comments: Although the oximeter is not as accurate as some other instruments for measuring the oxygen saturation of blood, it is useful because of its simplicity, and because it utilizes a noninvasive technique. Oximetry instrumentation is still being improved, is expensive, and, as stated above, is used chiefly to measure changes in, rather than exact percent of, oxygen saturations.

Instrument: Spirometer

Variables: The actual variables measured using spirometry are the volume of air expired during various maneuvers and the time required to expire that volume. From these two variables a researcher may obtain a measure of several derived variables of respiratory function.

Some of the derived variables that may be obtained include: (1) all primary lung volumes except residual volume, (2) all lung capacities except total lung capacity, (3) forced expiratory volume in one second, (4) air flows such as forced expiratory flow between 25 and 75 percent of forced vital capacity, etc. These and many other variables of pulmonary function can be obtained from spirometry. For a detailed accounting, the investigator should refer to a manual of pulmonary function testing.

Parameters: As indicated above, the spirometer can be used to measure several variables related to pulmonary function. In many disease processes there are significant changes in lung volumes, capacities, and maximum air flows. The spirometer can be used to compare the results obtained from a test subject with those expected from a normal subject of the same sex, height, and age. The results may also be obtained serially over time to compare with previous tests in the same subject to note changes such as progression or improvement in a disease process.

Spirometry is only one of a whole battery of tests of pulmonary function, and it has at least two important limitations. One, the results obtained are not specific to any single disease process but rather indicate broad categories of respiratory diseases. Two, spirometry does not necessarily allow for detection of disease processes in very early stages.

In order for the investigator to use spirometry to obtain meaningful results, he(she) should have special training in the use of the instrument itself. The investigator must also know how to prepare and properly guide subjects who are being tested. This latter point is particularly important, as accurate and repeatable recordings require the cooperation and effort of the subject being tested. Subjects who are decidedly ill or who do not understand precisely what is expected of them may not give their maximum effort. Without such effort by the subject, the conclusions inferred from the results may be erroneous.

Research Applications: The spirometer can be used to obtain a measure of any of the variables listed under the second section above. It can be used to monitor the progress or changes in airway disease. A researcher could use the spirometer to evaluate the pulmonary status of patients both preoperatively and postoperatively to ascertain changes in such things as vital capacity and tidal volume that occur as a result of the operative procedure or nursing interventions. The investigator could also use the spirometer to determine the duration of specific acute or chronic disturbances of pulmonary function. The instrument can be used to test the efficacy of drugs that specifically affect airway diameter as determined by measurement of air flow during forced expirations.

Descriptions: Spirometers are generally mechanical devices that have a physical displacement of some sort that is proportional to the amount of air expelled from the lungs. The subject being tested places his(her) mouth over a mouthpiece and breathes through it, with a spring clip usually placed on the subject's nose to prevent loss of air through the nasopharynx and nose. Too, there must be a tight seal around the mouthpiece to ensure that all exhaled air goes into the spirometer.

Mechanical spirometers require frequent checks to ensure that all components function properly. There must be no leaks in the system connecting the mouthpiece with the rest of the instrument and no leaks within the instrument. The machine should be calibrated periodically to ensure accuracy of results. The best mechanical spirometers have minimal inertia to cause back pressure or drag that may affect the results.

Electronic spirometers lack inertia that may be present in mechanical spirometers. With electronic spirometers, air flow is measured over a period of time by an electronic air flow sensor such as a pneumotach-pressure transducer, rotating vane or turbine, or an ultrasonic device. By multiplying flow by the duration of that flow (time), exhaled volume can be calculated. These calculations are often a part of the logic circuitry of the instrument, and in such instruments the flow and volume are displayed digitally.

Comments: Again, spirometry is limited in its diagnostic values; i.e., the tracings or information generated are not disease specific, but they can identify broad categories of disease. Some clinicians advocate that basic spirometry be made a part of any complete health evaluation.

Special Senses

Instrument: Anomaloscope and Pseudochromatic Tests

Variable: This instrument can assess an individual's color vision.

Parameters: The perception of color depends upon at least three factors: (1) the hue or wavelength of light, (2) saturation or homogeneity, and (3) brightness or intensity. Measurement of color perception depends upon the ability of the patient to see these three components in the total spectrum of visible light.

Methods for determining color perception deficiency or color blindness in an individual can be with either pseudochromatic tests or with an anomaloscope. The pseudochromatic tests are pigment tests where the subject matches, identifies, or arranges pigment using cards, discs, or charts. These are subjective tests that measure the perception of color as perceived by the subject. Another testing device, more accurate but also more expensive and requiring considerable training for the operator, is the anomaloscope. This is a spectral instrument in which the client adjusts light wavelengths or source of light. By matching up the intensity of different colors, it can be determined what kind of deficiency is present. Diagnosis involves the subjective comparison done by the client; thus, the measurements are not truly quantitative but qualitative.

These instruments are limited to testing for the presence of dichromatic vision, a condition in which color perception is restricted to one pair of primary colors, either blue-yellow, or occasionally red-green.

Dichromatic vision can be further divided into terms that are used to describe a specific type of dichromatic vision: protanopia, which involves a deficiency of the red gene, and deuteranopia, which involves a deficiency of the green gene. These terms describe defective color vision of the dichromatic type that is characterized by retention of the retinal cone sensory mechanisms for detecting blue-yellow hues but lacking the mechanism to detect for either red or green. There is a third rare and obscure type of defective color vision, tritanopia, in which the sensory mechanism for the detection of only the red-green hue is present.

Research Application: Most problems with color vision occur because of a genetic deficiency in which a single group of color receptive cones is missing from the eyes. Color blindness is also sex linked. Approximately 1 in 50 men lacks the red gene in the X chromosome, and approximately 1 in 16 men lacks the green gene. In terms of percentage, this translates into 2 percent of the male population as protanopes and 6 percent as deuteranopes.

Diseased or impaired optic nerves or maculae are accompanied by defects in color vision. Although pseudochromatic testing aids in detecting the presence of a color deficiency, it will not identify the locus of the problem. Retinal impairment is characterized by blue-yellow color deficiency, while optic nerve disease is characterized by a red-green deficiency. The anomaloscope does assist in differentiating these two conditions.

Description: The least expensive and most common method of testing for defects in color vision is through the use of techniques based on the pseudochromatic principle.

1. The Rosner "Do-It-Yourself" Test consists of a 24- by 30-inch display of 16 pseudochromatic plates. Instructions at the bottom of the display interpret the test for the subject. The plates consist of patterned, printed, and colored dots. Visualization of these plates reveals one pattern to the person having normal color vision and another pattern to the subject having a color deficiency. Using this test, it is possible to identify protanopic and deuteranopic individuals.

2. The Hardy-Rend-Rittler (HRR) Test consists of a booklet of 24 plates of gray versus color-confusable dots. There are four different types of screening cards in this set, which has the advantage of being unlearnable. This test permits quantification of impairment in terms of mild, medium, or severe.

3. The Farnsworth D–15 Test uses a reference color chip that the subject uses as a reference point to align 15 movable chips in order of color progression. This test is simple and inexpensive

but does not identify minor degrees of either dichromatism or trichromatism.

4. The Farnsworth-Munsell 100-Hue Test is based on the same principle as the Farnsworth D–15 Test. Hues in pastel colors numbering 100 are arranged in a numbered, colored sequence obvious to the person with normal color vision. Any misarrangement of the color chips is scored on a circular chart. The greater the error from the hue's normal position in the sequence, the greater the score. This test identifies protanopia, deuteranopia, and tritanopia. Its drawbacks are that it is time consuming, complex, expensive, and does not provide quantification data, i.e., the degree of color deficiency.

Various revisions of the classic Ishihara Pseudochromatic Test for rapid screening of red-green deficiencies have been issued and are in the process of clinical validation.

In tests in which the subject adjusts light wavelengths and the source of light, there is one simple test using a lantern, diaphragms, and a variety of complex instruments called anomaloscopes. For example, the F. W. Edridge-Green Lantern Test is one of the practical color diagnostic tools. It uses colored glass filters, a standard light source, and diaphragms for the regulation of light intensity. For accuracy and quantification, the spectral-matching technique provided by the anomaloscope rates highest for evaluating color vision deficiencies.

There are several versions of the anomaloscope that can be used to determine various deficiencies. The most used unit is an optical system that matches a yellow light to an addition of red and green lights. One control on the instrument varies the intensity of the yellow light. The other control varies the ratio of red light to green light. With these controls, the subject matches red and green composites to the yellow light. From the settings of these dials, it is possible to determine whether or not the subject has a color deficiency of red or green.

Anomaloscopes for detecting blue deficiencies have not been very successful. This, coupled with the fact that few people have a deficiency in blue, accounts for the lack of reliable tests to detect tritanopia.

Comments: All testing for color vision must take into account illumination and full spectral representation in the lighting of the testing situation. Diagnosis of visual color deficiencies involves a subjective comparison by the subject. Thus, measurement of this variable is essentially qualitative rather than quantitative. Quantitative research tools developed to measure color deficiencies do so by analyzing the light filters that exist on the retinal cones. These instruments are not yet perfected.

Instrument: Audiometer

Variables: Auditory hearing, differential, or discomfort thresholds, auditory frequencies, and auditory discrimination are the variables that can be assessed by this instrument.

Parameters: The instrument is a commercially available product that is most reliable when operated by an audiologist in a controlled environment. A pure tone audiometer records quantitative measurements of hearing deficits, hearing differentials, and/or discomfort thresholds. A *speech audiometer* is used primarily for auditory discrimination of spoken words. An audiometer is not useful in the evaluation of labyrinth function.

The definitions that follow should help a potential researcher determine whether or not the audiometer should be chosen for use:

1. Auditory hearing or the "*threshold of hearing*" is that level of sound pressure that produces the sensation of tone from a given frequency at least 50 percent of the time. Intensity of sound is measured in decibels (dB).
2. The "*differential threshold*" is the smallest change or difference in sound level at specific tones and at specific frequency levels detectable by the subject. Due to the ears' nonlinearity, these thresholds often occur at different sound levels and at different frequencies in each of the subject's ears.
3. The "*threshold of discomfort*" is a measure of sound pressure that produces a painful sensation because of the tone, noise, or speech. This level is also referred to as the tolerance level or uncomfortable level.
4. *Auditory frequency* refers to the physical characteristics of the frequency of an audible wave that are responsible for the psychological sensation called pitch. Frequency of vibration of these sound waves is measured in cycles per second (cps). If the cycles are repetitive, then the rate of cps is called Hertz.
5. *Auditory discrimination* or speech discrimination is an individual's ability to properly recognize the spoken word or to

distinguish between speech sounds. The relationship between recognition of words to hearing level is termed speech reception threshold (SRT). The measurement of SRT is conducted to coordinate and supplement the findings of pure tone audiometry.

Research Applications: Hearing disorders have been categorized broadly into either sensorineural or conductive loss. By measuring auditory discrimination and hearing thresholds and frequency on the designated audiometer, valuable information can be recorded to assist the clinician in determining the category or type of hearing loss.

Clinically, the investigator may have interest in exploring questions about environmental noise and the effects of selected drugs that may have implications for a potential sensorineural hearing loss. Questions related to such problems as obstruction and chronic infections fall into the category of conductive hearing loss. For some researchers, the process of aging may be most intriguing because of its implications for both sensorineural and conductive loss.

Descriptions: The pure tone audiometer produces tones that vary according to frequency and intensity. By plotting the intensity of sound against the frequency or pitch, a chart can be made that reflects the client's hearing. In principal, the speech audiometer is essentially the same as the pure tone audiometer but it uses the spoken word rather than pure tones.

The standard audiometer measures the threshold of hearing or audibility. The detectable intensity or decibel (dB) is not the same for all frequencies. The human ear is more sensitive to sound at midband frequencies that range from 500 to 4,000 Hertz (Hz). The standard range of measurement for hearing has been set at 64 to 16,000 Hz. The audiometer is compensated for the mean average value of response of a normal human ear. When the dial is set on 0 dB, the sound level provided is the average sound intensity for a normal ear. This level is called zero hearing level or normal hearing level. The client's values for each frequency indicates the deviations for each ear with respect to the zero hearing levels. These values may also indicate the hearing loss at each frequency for that client. Audiometers will produce an audiogram of the client's hearing loss using both frequency and intensity data.

Another test consists of superimposed, brief, short bursts of 1 or 5 dB on a sustained tone at various sound levels. The sustained levels used are 20 or 40 dB. The client then responds to an indication of the level change and the number of times the change is heard. This test will measure accurately the differential threshold and is called the short increment sensitivity index (SISI).

Most commercial audiometers have a limit of 100 dB. Additional amplifiers and attenuators must be attached to the standard instrument to elicit data related to the threshold of pain or "discomfort thresholds." Even then, client discomfort during testing is a factor that prevents a reliable pain index.

The equipment necessary for auditory discrimination testing is somewhat modified from the standard audiometer and includes:

1. Commercial speech audiometer with audio amplifier with "VU" meter.
2. Audio-magnetic tape equipment for input.
3. Recordings of phonetically balanced (PB) words.
4. A nonaudio signaling method that will permit communication with the patient without interjection of another sound variable.

Once the speech reception threshold (SRT) is established, it is then increased by 40 dB to be used as the base level for the speech discrimination tests. The client listens to a list of 50 phonetically balanced words and writes down each word. The percentage of correct words is calculated, providing an accurate measure of speech discrimination. Results have reliability if the tester has controlled variables such as verification that the client is familiar with the vocabulary of the word list, and testing of the equipment for noise distortion.

All of the testing with an audiometer should be performed by an audiologist or an experienced technician in a soundproof room.

Careful instruction must be given the client so that he(she) understands and can perform the required testing procedure.

Comments: The most often used and the most significant of the various threshold tests is the hearing or auditory threshold. In pure tone testing, data establish the hearing loss in relation to the standard average hearing level.

The SISI tests to measure differential thresholds are more difficult to assemble and control. Correlation from test to test and test validity are not easily established; however, there does seem to be good correlation with various types of lesions. This test should be supplemented by other tests to evaluate recruitment. The SISI test indicates correlation with aging for the sensorineural processes.

As mentioned earlier, the threshold of pain is an area in which information is lacking because of the nature of the tests and equipment problems. When these tests have been run, the pain threshold appears to occur at essentially the same decibel level for all audible tones. At the pain threshold level, it becomes difficult or impossible to discriminate between tones. These factors have become important in the evaluation of environmental noise such as aircraft and industrial equipment sound.

Standardized frequency testing makes it fairly easy to evaluate frequencies and thresholds and to determine any correction needed for the hearing level at each frequency. As it is very unlikely the ear has discontinuities with respect to frequencies, pure tone at discrete frequencies can be a valid analysis of the client's hearing curve.

Often speech discrimination testing is used to verify the results of pure tone audiometry tests. The testing also aids in defining certain impairments that may not be associated with hearing loss but may be associated with the way information is processed by the brain.

In all phases of audiometry, it must be noted that, when making hearing tests involving large differences between the two ears, it becomes necessary to use masking noise to blank out the "good ear" from bone conduction. Also, there are other types of auditory threshold tests other than those mentioned that are used for refining a specialized diagnosis.

Instrument: Tonometer

Variable: Intraocular pressure is the variable to be measured. Colloidal contents of the aqueous and vitreous body exert pressure against the corneal membrane. This pressure measurement is expressed in several forms but most often in millimeters of mercury (mm. Hg.).

Parameters: The instrument is used as an indirect method to measure the pressure in the ocular chamber. This can be accomplished by a hand-held tonometer applied to the unanesthesized cornea. The recorded measurement will give only an indication of increased or decreased intraocular pressure. Although normal intraocular pressure varies, it averages around 16 mm. Hg. when measured with a hand-held tonometer.

Research Application: Many of the causes for increased intraocular pressure are not known. High intraocular pressure, even lasting only a few days, can cause total permanent blindness at times. Slightly elevated pressure can cause progressive blindness over a period of years. As the pressure rises, the retinal artery is compressed, thus depriving the retina of nutrition.

Glaucoma is a striking example of a disease in which intraocular pressure is high. In glaucoma the pressure sometimes rises to readings as high as 80 or 90 mm. Hg. Increased intraocular pressure has also been identified with some infections and trauma to the eye.

Description: The external probe in applanation tonometry makes a flat indentation on the eyeball. This flat indentation is generated by a flatfaced piston placed against the cornea. This piston has a diameter of 3 mm. The pressure applied to the piston to produce the flat indentation of 3 mm. is measured. This piston pressure is counteracted by an equal pressure in the ocular chamber. Thus, the piston pressure measured is the intraocular pressure. The diameter of 3 mm. is used to provide a simple conversion to millimeters of mercury.

To use the hand-held applanation tonometer, it is not necessary to anesthesize the eye, but use of a wetting solution is advisable. Instruments in use today provide a useful range of accuracies in measuring intraocular pressures.

The hand-held tonometer has a potential error because it can cause an indentation equivalent. To overcome this error, simultaneous pressure measurement can be made with a direct cannula and pressure transducer against the tonometer. By noting both the static pressure and the levels caused by the tonometer in use, it is possible to plot curves that offset the pressure increase caused by the volume of indentation and thus provide an accurate correlation with the pressure in the eye at zero indentation.

The larger plunger-type tonometers are used with local anesthesia for measurements of outflow (rate of volume loss) of aqueous fluid. This type of measurement is best accomplished by tonography, i.e., a recording of the intraocular pressure against time.

A comparison can be made with other methods of measurements of flow rates from the eye. The inflow must be equal to that rate, and the intraocular pressure will build in the eye until inflow and outflow are equal.

The hand-held tonometer is standard equipment in most eye clinics and can be utilized by researchers with a minimum amount of instruction.

Comments: New techniques for use of tonometers are being developed, which may produce fewer errors in measurement and also prove to be quite simple to use. One such device employs the use of a jet of air to barely flatten the cornea, whose distortion is then sensed optically. As the air pressure is increased to just flatten the cornea, the pressure is sensed and determined. With this method, the aqueous body is essentially not indented. As yet, this is a developing technique and is not routinely used as a clinical tool.

APPENDIX A

Selected Psychosocial Compilation References

Bonjean, Charles, Hill, Richard, and McLemore, S. Dale. *Sociological measurement: An inventory of scales and indices.* San Francisco: Chandler Publishing Co., 1967.

Contains bibliographic information on 2,080 sociological scales and indices used in research studies reported in four periodicals—*American Journal of Sociology, Sociological Review, Social Forces,* and *Sociometry*—from 1954 through 1965. The scales and indexes are divided into 78 conceptual classes; 47 measures that were used or cited more than 5 times are described in detail. Information in these detailed descriptions usually includes: classification class title, bibliographic information, variables measured, developmental procedures, scoring procedures, validity and reliability data, and a description of the sample with whom the measure was used. Copies of some of the instruments are included.

Buros, Oscar (Ed.). *Personality tests and reviews.* Highland Park, New Jersey: Gryphon Press, 1970.

Consists of 9 major sections: (1) Personality Test Index—a comprehensive bibliography of personality tests; (2) Personality Test Reviews—a reprinting of corresponding test review sections in the six *Mental Measurements Yearbooks* (MMY); (3) MMY Test Index—a guide to all tests and test reviews in the six MMYs; (4) the MMY Book Review Index—an index to excerpted book reviews in the six MMYs; (5) the APA-AERA-NCME Standards for Educational and Psychological Tests and Manuals; (6) a publisher's directory and index; (7) Index of Titles—includes all nonpersonality tests in the six MMYs, *Tests in Print,* and *Reading Tests and Reviews;* (8) Index of Names—includes all persons who have reviewed a test—personality or otherwise—for a MMY; and (9) a Scanning Index to Tests—an expanded table of contents to the personality tests contained in this volume.

Buros, Oscar (Ed.). *Tests in print II.* Highland Park, New Jersey: Gryphon Press, 1974.

Contains 14 major sections: (1) a comprehensive bibliography of all known tests published as separates for use with English-speaking subjects; (2) a classified index to the contents of the test sections of the seven Mental *Measurements Yearbooks* (MMYs) published to date; (3) a reprinting of the 1974 APA-AERA-NCME *Standards for Educational and Psychological Tests;* (4) comprehensive bibliographies on the construction, use, and validity of certain specific tests through 1971; (5) a classified list of tests that have gone out of print since the 1961 *Tests in Print* was published; (6) a cumulative name index for each test with references; (7) a title index that covers in-print and out-of-print tests, as well as inverted, series, and supersided titles in the MMYs; (8) an analytic name index covering all authors of tests, reviews, excerpts, and references in the MMYs; (9) a publisher's directory with a complete listing of each publisher's test titles; (10) a classified scanning list that describes the population for whom each test is intended; (11) identification of foreign tests and journals with the country of origin in brackets immediately after a test entry or journal; (12) factual statements implying criticism, e.g., "1971 tests identical with 1961 copyrighted tests except for format," "no manual," etc.; (13) listing of test titles at the foot of each page to permit immediate identification of pages consisting only of references or names; and (14) directions on how to use the book and an expanded table of contents.

Buros, Oscar K. *The seventh mental measurements yearbook.* Highland Park, New Jersey: Gryphon Press, 1972.

Contains critical reviews of 546 commercially available tests in the fields of education, psychology, and industry. Copies of the tests are not included but publishers are identified and addresses provided, as are extensive bibliographies for the tests. A new edition is in preparation and is expected to go to press in November 1978.

Cattell, Raymond G., and Warburton, Frank. *Objective personality and motivation tests.* Urbana, Illinois: University of Illinois Press, 1967.

Composed of 612 tests of personality (688 when child forms are counted separately). Each measure is described as follows: test title (author's designation), test title (designation presented to subject), age range of test, administration time, formal structure of test (e.g., ability, performance, opinionnaire, projective, etc.), variables derived from test, techniques for achieving unfakeability, theory supporting the test, design (positive and negative features), sample test items, and procedures for administration and scoring.

Chun, Ki-Taek, Cobb, Sidney, and French, John, Jr. *Measures for psychological assessment: A guide to 3,000 original sources and their application.* Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1975.

Developed to provide a comprehensive bibliography relating to all measures of mental health and related concepts, the volume entries are based on a search of 26 measurement-related journals in psychology and sociology from 1960 to 1970. There are two major sections. In the Primary Reference Section, information relevant to a particular test includes a bibliographic reference to the first source which described the device, the tool's title, and key words which describe the tool's content. In the Application Section, information includes a serial number to identify each test application instance, bibliographic data referencing an article or other publication in which the tool has been used, a set of terms indicating the type of information available in the article or publication cited, and other tools used in the article or publication cited.

Comrey, Andrew L., Backer, Thomas E., and Glaser, Edward M. *A sourcebook for mental health measures.* Los Angeles: Human Interaction Research Institute, 1973.

Includes 1,100 abstracts of mental health—related psychological measures. Each abstract is organized into two major sections. Section 1 is a heading presenting identifying information in the following order: title of measure, source of the measure, name(s) of the measure's author(s), and address of the senior author. Section 2 contains an abstract of 300 words or fewer providing the following information: purpose of the measure, target population administration time, number of items, types of items, response modes, available reliability and validity data, and findings of the major research application of the measure. Also furnished is information as to how to obtain a copy of the measure.

Johnson, Orval G. *Tests and measurements in child development: Handbooks I and II.* San Francisco: Jossey-Bass, 1976.

A comprehensive guide to 1,200 noncommercial or unpublished measures in child development covering the age group of birth to 18 years and the years 1956–1975. Instruments are classified into 10 categories and each description provides the following information: title, author(s), age of subjects for whom the instrument is suitable, variable(s), type of measure, administration and scoring, source from which the tool may be obtained, description of the tool, reliability and validity data, and bibliographic citations.

Lake, Dale G., Miles, Matthew B., and Earle, Ralph B. Jr. *Measuring human behavior.* New York: Teachers College Press, 1973.

Provides systematic reviews of 84 different instruments in the following categories: personal variable; interpersonal, groups, and organizational relationships. Information provided on each instrument includes: title, author, availability, variable measured, format, administration, scoring, development, critique (i.e., psychometric data), general comments (usefulness, cautions, etc.), references, and "uniterms" (key words). The volume also contains reviews of other existing compendia of instruments.

Lyerly, Samuel B. *Handbook of psychiatric rating scales.* Rockville, Maryland: National Institute of Mental Health, 1973.

Contains descriptions of 38 published and unpublished rating scales that are being used or have been used in psychiatric settings with adults and children, as well as some scales concerned with areas not exclusively "psychiatric," such as general social and vocational adjustment. The basic descriptive format on each scale includes title, source, general description, patients, rater information, source of scale items, reliability and validity data, and related references. Also included in the volume is a listing and brief description of 23 additional scales that have been rarely used in recent years but are of historical significance.

Miller, Delbert C. *Handbook of research design and social measurement* (3rd ed.). New York: David McKay Co., 1977.

Designed to improve research and expedite the design and all operational phases of research, this handbook is organized around the functions of research design and sampling; collection of data; statistical analysis; selection of sociometric scales and indexes; and research funding, costing, and reporting. Part 4 of the volume describes 48 measures divided into 12 categories: social status; group structure and dynamics; social indicators; measures of organizational structure; evaluation research and organizational effectiveness; community; social participation; leadership in the work organization; morale and job satisfaction; scales of attitudes, values, and norms; family and marriage; and personality measurements. Each measure review includes title, author, variable(s) measures, description of the measure, where published, reliability and validity data, utility of the measure, and bibliograhic data denoting instances of the measure's use in research. In most instances a copy of the measure itself is also included.

Price, James L. *Handbook of organizational measurement.* Lexington, Massachusetts: D.C. Heath, 1972.

Contains descriptions of measures for 22 concepts relative to organizations. Descriptive information about each measure includes format, definition, data collection procedures, validity, reliability, comments, source of the measure, and further sources of information.

Reeder, Leo G., Ramacher, Linda, and Gorelnik, Sally. *Handbook of scales and indices of health behavior.* Pacific Palisades, California: Goodyear Publishing Co., 1976.

Volume focuses on scales and indices within a defined segment of health services behavior research, i.e., health status, health behavior, health orientations, and utilization of health services. Descriptive information includes author(s); title; major health concept investigated; research design; theoretical framework; research hypotheses and/or questions; model used; conceptualization and operationalization of independent, intervening, and dependent variables: description of population, sample, and analysis units; and major findings and interpretation. Copies of the scales and indices are also included.

Robinson, John P., Athanasiou, Robert, and Head, Kendra B. *Measures of occupational attitudes and occupational characteristics.* Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1969.

Provides a systematic review and evaluation of 77 scales relevant to the study of variables which pertain to persons' occupations. Major headings are general job satisfaction scales, job satisfaction for particular occupations, satisfaction with specific job features, concepts related to job satisfaction, occupational values, leadership styles, other work-relevant attitudes, vocational interest measures, and occupational status measures.

Robinson, John P., and Shaver, Phillip. *Measures of social psychological attitudes.* Ann Arbor, Michigan: Institute of Social Research, University of Michigan, 1973.

One hundred six scales are reviewed in this volume under the headings of self-esteem and related measures, other sociopolitical attitudes, values, general attitudes toward people, religious attitudes, and methodological scales. Almost all of the described instruments are reproduced in full. There is a long review of the major attempts over the past 15 years to measure "life satisfaction" and "happiness."

Shaw, Marvin E., and Wright, Jack M. *Scales for the measurement of attitudes.* New York: McGraw-Hill, 1967.

In addition to chapters on the nature of attitudes and methods of scale construction, descriptions are included of 176 attitude scales that deal with social practices, social issues and practices, international issues, abstract concepts, political and religious attitudes, ethnic and national groups, significant others, and social institutions. Descriptive material about each scale includes title, description, subjects, response mode, reliability and validity, plus comments on strengths and/or weaknesses. An exhibit of each instrument accompanies the description.

Strauss, Murray A. *Family measurements techniques: Abstracts of published instruments, 1935–1965.* Minneapolis, Minnesota: University of Minnesota Press, 1969.

Educational, psychological, and sociological professional journal literature from 1935 to 1965 was searched; 319 family behavior measures were abstracted and are described in this volume. Each abstract contains the following material on the measure described: author, title, variables measured, instrument description, a sample item, validity data, sample size, sampling method, sample characteristics, reliability, norms, administration and scoring, availability, and references.

Walker, Deborah K. *Socioemotional measures for preschool and kindergarten children.* San Francisco: Jossey-Bass, 1973.

Lists and describes 143 commercial and noncommercial, published and unpublished, measures which focus on the social and emotional behavioral areas of children aged 3 to 6. The measures are divided into six categories—attitudes, general personality and emotional adjustment, interests on preferences, personality or behavior traits, self-concept, and social skills or competency. For each measure, Walker provides title, author(s), age range of appropriate respondents, measurement technique involved, sources in which measure is described, where measure can be obtained, administration and scoring information, norms, reliability, and validity data.

Ward, Mary Jane, Lindeman, Carol, and Bloch, Doris (Eds.). *Instruments for measuring nursing and other health care variables:* Washington, D.C.: Government Printing Office, in press.

Contains descriptions of 138 instruments for measuring psychosocial variables and 19 pieces of apparatus for measuring human physiological variables. Headings for descriptions of psychosocial instruments include: title, author(s), variables measured, nature and content, administration and scoring, development (rationale, source of items, procedure for development), reliability and validity, use in research, comments, references, sources of additional information, and copyright information). Copies of 133 of the instruments are included. Headings for the physiological instrument descriptions are: title, variable(s), parameters, research application, description, and comments. Indexed by author, title, and key concepts.

Selected Physiological Instruments References

Brown, J. H., Jacobs, John E., and Stark, Laurence. *Biomedical engineering.* Philadelphia: Davis, 1971.

Written for the novice in bioengineering and presented as an introduction to basic principles of modeling; systems theory; control; biological systems analysis; instrumentation; the development of instruments, devices, and systems; and engineering in the delivery of health care services.

Cromwell, Leslie, Weibell, Fred J., Pfeiffer, Erich A., and Usselman, Leo B. *Biomedical instrumentation and measurements.* Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Intended primarily for the reader with a technical background in electronics or engineering but with limited knowledge of physiology. There are illustrations as well as references to easily accessible literature where a greater depth of knowledge of physiology might be helpful or necessary.

Geddes, L. A., and Baker, L. E. *Principles of applied biomedical instrumentation (2nd ed.).* New York: Wiley, 1968.

Written for the life scientist or physical scientist engaged in research, teaching, or patient care who feels the need for additional knowledge of the principles underlying many of the physical instruments available for use in patient care and research.

Sommer, Richard. Guide to scientific instruments. *Science*, 1975, *190* (4216A), 9–171.

Contains a list of laboratory instruments and equipment plus the names and addresses of their manufacturers.

Thomas, Harry E. *Handbook of biomedical instrumentation and measurement.* Reston, Va.: Reston Publishing Company, 1974.

Contains a brief description of the anatomy and physiology directly related to the equipment and instrumentation described. The instrumentation descriptions include the purposes of the measurements as well as the methods of measurement. The book is heavily oriented toward cardiac instrumentation, intensive care, and life-support equipment.

Selected Clinical Laboratory References

General

Davidson, Israel, and Henry, John B. (Eds.). *Clinical diagnosis by laboratory methods* (15th ed.). Philadelphia: W. B. Saunders, 1974.

The "bible" of laboratory medicine, this book is the standard reference of choice in most clinical laboratories. It contains indepth explanations of all areas of laboratory medicine as well as illustrative procedures, clinical correlations, and normal values.

Clinical Chemistry

Annino, Joseph S. *Clinical chemistry, principles and procedures* (3rd ed.). Boston: Little, Brown and Company, 1964.

A simplified text covering the fundamental information, basic techniques, and routine tests which generally comprise the laboratory area of clinical chemistry. Some physiological discussion is included with each blood, urine, or fluid constituent presented. This text should be used as a survey of the field of clinical chemistry, since many of the methods presented are obsolete.

Cherin, Stanley M. *Chemistry for laboratory technicians*. Philadelphia: W. B. Saunders, 1971.

A simplified general chemistry text written from a practical laboratory-oriented approach. No prior chemistry background is necessary to use this text. It will provide the user with the basic chemical information necessary to understand standard laboratory procedures.

Hematology

Brown, Barbara A. *Hematology: Principles and procedures* (2nd ed.). Philadelphia: Lea and Febiger, 1976.

A basic introduction to hematology with reference to routine laboratory procedures. Includes a fundamental introduction to coagulation and the principles of common laboratory procedures. Some special methods in hematology are illustrated.

Rapaport, Samuel I. *Introduction to hematology*. New York: Harper and Row, 1971.

An indepth overview of clinical hematology. This text is classified by clinical syndromes and includes numerous case studies in which the laboratory data are analyzed. There is some reference to treatment.

Microbiology

Bailey, Robert W., and Scott, Elvyn G. *Diagnostic microbiology* (4th ed.). Saint Louis: C. V. Mosby, 1974.

A basic approach to microbiology, including the areas of bacteriology, mycology, and parasitology. This text requires only a minimal background in microbiology. The content is divided into two major areas: the technical identification of the organism and the sites from which these organisms are commonly isolated as pathogens.

Youmans, Guy P., Paterson, Philip Y., and Sommers, Herbert M. *The biologic clinical basis of infectious diseases*. Philadelphia: W. B. Saunders, 1975.

Describes the disease process in the host as it relates to a specific causative agent including diagnosis, treatment, and organism identification with some case presentations. This text covers major bacterial, fungal, and viral pathogens.

APPENDIX B

Psychosocial Instruments Referenced in Other Published Compilations [1]

Author(s)	Instrument Title	Compilation[2]
Brodman, Keeve et al.	Cornell Medical Index Health Questionnaire (CMI)	Buros, Oscar K.
Bullough, Bonnie	Alienation and Powerlessness	Reeder, Leo et al.
Comrey, Andrew L.	Comrey Personality Scales	Buros, Oscar K.
Conners, C. Keith	A Teacher Rating Scale for Use in Drug Studies with Children	Comrey, Andrew L. et al.
Coopersmith, Stanley	Self-Esteem Inventories	Comrey, Andrew L. et al.
Corwin, R. G.	Professional and Bureaucratic Employee Role Orientation Scales	Lake, Dale et al.
Duncan, Otis D., and Reise, Albert J.	Duncan and Reese Scale of Social Prestige	Miller, Delbert C.
Edwards, Allen L.	Edwards Personal Preference Schedule	Buros, Oscar K.
Ellsworth, Robert J.	MACC Behavioral Adjustment Scales	Lyerly, Samuel B.
Evenson, Richard C.	Geriatric Profile	Comrey, Andrew L. et al.
Evenson, Richard C.	Missouri Inpatient Behavior Scale	Comrey, Andrew L. et al.
Eysenck, H. J., and Eysenck, Sybil B.	Eysenck Personality Inventory	Buros, Oscar K.
Graham, Frances K., and Rosenblith, Judy F.	Neonatal Behavioral Examination	Educational Testing Service-Test Collection Bulletin
Greer, James H.	Fear Survey Schedule	Buros, Oscar K.
Hamilton, Max	A Rating Scale for Depression	Lyerly, Samuel B.
Hathaway, Starke R., and McKinley, J. Charnley	Minnesota Multiphasic Personality Inventory (MMPI)	Buros, Oscar K.
Hurvitz, Nathan	Marital Roles Inventory	Buros, Oscar K.
Lanyon, Richard I., and Overall, John E.	Psychological Screening Inventory	Buros, Oscar K.
Lester, David	Collett-Lester Fear of Death Scale	Comrey, Andrew L. et al.
Lubin, Bernard	Depression Adjective Checklists	Buros, Oscar K.
Michaux, William W.	Stress Index	Comrey, Andrew L. et al.
Petrovich, Donald V.	Pain Apperception Test (PAT)	Buros, Oscar K.

Author(s)	Instrument Title	Compilation[2]
Roen, Sheldon R., and Burnes, Alan J.	Community Adaptation Schedule	Buros, Oscar K.
Roth, Robert M.	Mother-Child Relationships Evaluation	Buros, Oscar K.
Rotter, Julian B.	Internal-External Control Scale	Comrey, Andrew L. et al.
Rumbaugh, Duane M.	Cardiac Adjustment Scale	Buros, Oscar K.
Schaeffer, Earl S. et al.	Maternal Behavior Research Instrument	Strauss, Murray A.
Seeman, Melvin	Seeman's Powerlessness Scale	Miller, Delbert C.
Shostrom, Everett M.	Caring Relationship Inventory	Buros, Oscar K.
Spielberger, Charles D. et al.	State-Trait Anxiety Inventory	Buros, Oscar K.
Stott, D. H., and Marston, N. C.	Bristol Social Adjustment Guides	Buros, Oscar K.
Ware, John E., Jr.	Patients' Perceptions of Their Health	Reeder, Leo et al.
Wolpe, Joseph, and Lang, Peter J.	Fear Survey Schedule	Buros, Oscar K.
Zukerman, Marvin, and Lubin, Bernard	Multiple Affect Adjective Checklist	Buros, Oscar K.

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[1] Copies of instruments collected by project staff which were described in other readily accessible published compilations.

[2] See appendix A for complete reference.

APPENDIX C

Operational Definitions

Instrument: A data-collecting device or tool used to assist in the process of securing observations in a manner that allows for quantification.

Reliability: The accuracy of the data in the sense of their repeatability or stability. It is an indication of the extent to which a measure contains variable errors—that is, errors which differed from person to person during any one testing and which varied from time to time for a given person measured twice by the same instrument.

Validity: The extent to which the instrument actually measures what it seeks or purports to measure (i.e., does it do what we think it does?).

1. *Face Validity*—does *not* refer to what an instrument actually measures, but to what it appears, on the basis of a subjective evaluation, to measure. That is, the test contains items that seem to be related to the variable measured.
2. *Content Validity*—content of the test seems to be relevant to the test author's stated purpose. The test content is based upon whatever knowledge and insight is available at the time of construction. This type of validity is most common in early stages of development.
3. *Logical or Sampling Validity*—a trait or content area has been carefully defined in behavioral terms. The total area defined has been broken down into categories and judged to have a sufficient number of items in each category to discriminate between those who possess the trait and those who do not.
4. *Criterion-Oriented (Predictive)*—to obtain validity coefficients of this type, a test or battery of tests is administered and these results are correlated with some other measure which is taken later. This other measure, called the criterion, is that which the test is supposed to predict (i.e., scores on an IQ test are correlated at a later time with grade average or scholastic achievement).
5. *Construct Validity*—there are several ways to establish construct validity as in the examples below:
    a. *Concurrent Validity*—a test or instrument that has been shown to correlate with some previously determined test of known validity in the same area (i.e., many group intelligence tests have been validated by their correlations with individual intelligence tests—two different types of tests to measure the same dimension).
    b. *Factorial Validity*—makes use of the technique called factor analysis to determine to what extent a given test measures a known underlying factor (e.g., in a battery of tests "critical flicker fusion" has a positive loading on the factor of mental alertness. This factor may be identified in that battery by any three or more of a dozen well-known indicators for that factor).
    c. *Discriminatory Validity*—means the scale for the variable can be used in several different ways, all of which indicate that the scale is valid. One way might be to show that the scale can discriminate or detect appropriate differences among relevant groups.

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APPENDIX D

Literature Searched

Periodicals Searched

1. *American Journal of Nursing*, 1955-mid-1976
2. *Nursing Outlook*, 1960-mid-1976
3. *Nursing Research*, 1952-mid-1976
4. *Journal of Nursing Education*, 1962-mid-1976
5. *Nursing Forum*, 1965-mid-1976
6. *Journal of Nursing Administration*, 1971-mid-1976
7. *Nursing Digest*, 1975-mid-1976
8. *R.N.*, 1968-mid-1976
9. *AORN*, 1968-mid-1976
10. *Canadian Nurse*, 1968-mid-1976
11. *JAMA*, 1970-mid-1976
12. *NEJM*, 1970-mid-1976
13. *AJPH*, 1965-mid-1976
14. *American Scientist*, 1970-mid-1976
15. *Scientific American*, 1968-mid-1976
16. *Journal of Health and Human Behavior*, 1965-mid-1976
17. *Journal of Human Behavior*, 1975-mid-1976
18. *Hospitals, Journal of the American Hospital Association*, 1970-mid-1976

Abstracts and Indexes

Dissertation Abstracts Sections A and B, 1968-1975
Cumulative Index to Nursing Literature, 1956-1975
Abstracts of Hospital Management Studies, 1963-1964
Hospital Literature Index, 1970-1975
Mental Retardation Abstracts, 1964-1974
Psychological Abstracts, 1960-1974
Research Grants Index, 1961-1970
International Nursing Index, 1966-1975
Sociological Abstracts, 1960-1975
Biological Abstracts, 1970-1975

Serials

ANA Nursing Research Conference, 1966-1972
Communicating Nursing Research, 1968-1974
Newly Initiated and Completed Research, Volumes 1–9
Health Service Reports
Clearinghouse on Health Indexes
Nursing Research in the South: A Survey

Publishers' Catalogs

Psychological Corporation
Consulting Psychologists Press
Science Research Associates

Titles and Abstracts

Master's theses and doctoral dissertations from the following schools of nursing were reviewed:
Adelphia Unniversity
Boston University
Catholic University
Emory University
Rutgers University
State University of New York, Buffalo
University of Arizona
University of California, San Francisco
University of California at Los Angeles
University of Colorado
University of Kansas
University of Michigan
University of Minnesota
University of Missouri, Columbia
University of North Carolina
University of Virginia
University of Washington
Wayne State University
Yale University

Notices of the Search

Notices of the search were placed in the following publications:
APA Monitor
NBNA Newsletter
Daily Challenge (Black Professional Newsletter)
Investigato
Nursing Outlook
Nurse Practitioner
Nursing Research
Nursing Service Newsletter
AERA's HPEER
WCHEN Newsletters

Letters

Letters were sent to:

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Deans of all schools of nursing in the United States

Research faculty in all schools of nursing in the United States

Nurse administrators in health service agencies in the WCHEN region

Chief nurses of all branches of the Armed Forces

Current and former principal investigators of research development grants

Members of the ANA Council of Nurse Researchers

Computerized Literature Searches

MEDLARS

Miscellaneous

Information sheets, newsletters, bibliographies of published articles, as well as informal leads and contacts, were used in the effort to locate instruments.

APPENDIX E

O.M.B. No. 068-S74103
Expires 12-31-76

WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION
NURSING RESEARCH INSTRUMENT COMPILATION
INSTRUMENT DESCRIPTION FORM

Please complete this form or attach material containing the information. Be certain to attach a copy of the instrument itself.

I. TITLE OF INSTRUMENT (if any)________________________________

II. PHENOMENA AND/OR VARIABLES UNDER STUDY:

Operational definitions: (if any)

III. IS THE INSTRUMENT DERIVED FROM A SPECIFIC THEORY? YES ____ NO ____

If yes, which one:

IV. DESCRIPTION OF INSTRUMENT:

A. Narrative description: (Type of instrument, number of items, etc. Describe limitation for people and setting characteristics along with suggested use.)

B. Developed by (if other than person completing form):

________________________________ (Name)

________________________________ (Professional background)

C. Type of data produced: Nominal ___ Interval ___

Ordiral ___ Ratio ___

Other (list) ____________________________

D. Have norms been developed for the instrument: YES _____ NO ____

If yes, for what population? (If available, please attach or cite reference).

E. Has any work been done in determining the reliability of the instrument? YES ____ NO ____

If yes, see Part 2 - A. & B.

F. Has any work been done in determining the validity of the instrument? YES ____ NO ____

If yes, see Part 2 - C. D. & E.

V. PROCEDURE FOR ADMINISTRATION

A. Include necessary preparation of environment, investigator, and subject:

B. Time, energy, and skills needed for subject (i.e. reading level ability, etc.)

VI. PROCEDURE FOR SCORING:

VII. WHAT, IF ANY, PROBLEMS DID YOU ENCOUNTER IN THE USE OF THE INSTRUMENT?

VIII. RELIABILITY AND VALIDITY

A. Has the reliability of the instrument been determined? YES____NO____

If yes, describe procedure, population, and list reliability coefficients:

Over time (test-retest)

Over test (internal consistency)

B. Has the discriminatory power of the instrument been determined?

YES____NO____

If yes, describe procedure and result:

C. Has the content validity of the instrument been determined?

YES____NO____

If yes, describe procedure, population, and validity coefficient:

D. Has the construct validity of the instrument been determined?

YES____NO____

If yes, describe procedure, population, and validity coefficient:

E. Has the criterion-oriented predictive validity of the instrument been determined? YES____NO____

If yes, what were the criterion variables against which the predictive validity was established, and if the instrument itself was used as a criterion measure, what were the predictor variables which were related to it, and what were the correlation coefficients?

Describe procedure, population, and validity coefficient:

IX. Copyright: YES____NO____ Cost of materials (if any): ____________

X. IS THE INSTRUMENT INCLUDED IN ANY OTHER COMPILATION OF DATA-GATHERING DEVICES? YES____NO____

If yes, list:

XI. LIST (OR ATTACH IF AVAILABLE) ANY REFERENCES DESCRIBING DEVELOPMENT OR USE OF THIS INSTRUMENT.

XII. PERSON TO CONTACT TO OBTAIN INSTRUMENT (If different than person completing form):

Name: ______________________________

Address: ______________________________

Zip code ____________

XIII. PERSON COMPLETING FORM:

Name: ______________________________

Address: ______________________________

Zip code ____________

PLEASE RETURN TO: Mary Jane Ward, R.N., Ph.D.
Project Director
Compilation of Nursing Research Instruments
Western Interstate Commission for Higher Education
P.O. Drawer P
Boulder, Colorado 80302

APPENDIX F

Bioinstrumentation, Research, and Human Rights

The physiological instruments described in this publication are among those nurses can use at the bedside or in laboratories to conduct clinical research with human subjects. However, some of the instruments involve intrusive procedures that require the collaboration of a physician. In the clinical practice of medicine, intrusive equipment used for life-support purposes is often already attached to patients in intensive care units and other clinical settings. In these situations, nurse researchers can seek access to these patients in order to use the monitoring equipment for research purposes. Blood or other needed samples can be withdrawn from existing needles, stopcocks, tubes, etc.

However, bioinstruments that invade a body orifice, break the skin, interfere with physiological functioning, or cause pain should be critically assessed before they are selected for use. Currently, tensions between the scientific community and the public are very high. This hostile atmosphere is related, in part, to the elitism of some scientists who possess knowledge but assume no responsibility for making that knowledge understandable to the consumer who directly or indirectly pays most of the research bill. Suspicion of researchers is also generated because of previous exploitive practices with human subjects. At a time when the whole world is seemingly impersonal, people, more often than not, are seeking individual attention and care—not to be experimented on.

Of increasing concern to all, scientists and lay people alike, is the potential of research to modify human behavior, alter human nature, and engineer life and death. Human Subjects Committees are responsive to these concerns and require from the potential researcher extensive, carefully worked-out justifications, protocols, and safeguards for human protection before approval will be granted for any research. Even with such committee approval, human subjects, especially normal human subjects, may be difficult to recruit when intrusive bioinstrumentation is to be used.

Ann M. Voda, R.N., Ph.D.

APPENDIX G

Factors to be Considered in Physiological Instrument Selection

Bioinstrumentation provides the tools with which to measure physiological variables and parameters. Scientists who use bioinstruments in their work or in research are involved in that branch of science now known as biometrics. The science of biometrics is not new—physiologists have always used a wide variety of scientific measuring instruments. Since the 1950's, there has been a proliferation of bioinstrumentation development and its use in the health sciences.

Obviously, measurements provided by an instrument must have the potential to answer the questions being asked about the biological organism. This accomplished, bioengineers agree that, in the design and specifications of medical instrumentation systems, the scientist should pay particular attention to each of the following factors:

Accuracy is the capability of an instrument to follow the true value of a given phenomenon; it is a measure of systematic error. Error can occur for a variety of reasons, e.g., ambient temperature change, drift, poor frequency response. Attention must be paid to restrictions on the conditions under which measurements are made. Accuracy of instrument measurements can be determined only by reference to some kind of standard, and this standard must be related at some level to international standards of length, mass, and time.

In clinical research, one has to assess whether or not application of the instrument itself alters physiology to the point that accuracy is affected. For example, every method used to measure blood pressure before the introduction of plethysmography interrupted the internal milieu through the application of pressure or intrusive trauma so that totally accurate measurements were not possible. Care in usage, mounting, calibration, and checking are among the most important factors in reducing errors in measurement.

Range is the quantitative limits of the stimulus between which the instrument is calibrated to perform measurements. The range of an instrument must be such that it can provide a usable reading from the smallest expected value of the variable to and including the largest expected value.

Sensitivity is defined as the smallest change in the measured quantity that an instrument can reliably measure. An instrument cannot be more accurate than its sensitivity. Various types of friction in the instrument and random fluctuations of matter (or "noise," as it is called) are the major sources of interference with instrument sensitivity.

In selecting an instrument, one needs to be certain that it is sensitive enough to accomplish the task required. Extremely sensitive instruments are expensive to purchase, difficult to maintain, costly to operate, and may produce data that have to be converted before analysis. If extremely small or fine units of measurements are not required, a very sensitive instrument is a misuse of resources.

Stability is the ability of an instrument to return to a steady state following an input stimulus. It is important that an instrument be stable over the range needed for measurement of the variable under study.

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Signal-to-noise ratio should be as high as possible. In the hospital environment, "noise" or interference is very common. It can be due to poor grounding or to interference from electromagnetic, electrostatic, or diathermy equipment. It is important that the signal-to-noise ratio in the actual environment in which the measurements are to be made is known and controlled.

The criterion of standardization in the selection of bioinstrumentation is very important. One of the greatest problems in research is obtaining data in units of measurement or in a form that makes that data comparable with data from other studies.

The standardization of the instrument itself is another aspect to be considered by the potential user. The complexity of standardization procedures such as calibration, comparison with a standard instrument, and/or the mixing of standard solutions must be considered in terms of the time required and the possibility of error. The frequency with which the standardization of an instrument must be checked can require an inordinate amount of time. So, too, whether or not a technician or company representative must check and maintain standardization is a factor that must be considered in terms of cost and convenience.

The mobility of an instrument is another criterion for selection. The instrument's weight and mounting influence the ease with which it can be moved. If a mobile unit is important, one should look for lightweight instruments or those which, when mounted on wheels, will go through doorways easily.

Ann M. Voda, R.N., Ph.D.

APPENDIX H

Glossary of Physiological Instrument Terms

ACCURACY—The capability of an instrument to follow the true value of a given phenomenon. It is often confused with "inaccuracy" which is the departure from the true value into which "all causes" of error attributable to the instrument are lumped. This includes errors such as repeatability, hysteresis, linearity, drift, gain stability, temperature effect and many others.

AMPLIFIER INPUTS

BALANCED—A symmetrical input circuit having equal impedance from both input terminals to ground.

DIFFERENTIAL—A symmetrical input circuit that rejects voltages which are the same at both input terminals and amplifies the voltage difference between the two input terminals. A differential input can be either "balanced" or "floating" and may also be "guarded."

FLOATING—An isolated input circuit that is not connected to ground at any point. (The maximum permissible voltage to ground is limited by electrical design parameters of the circuit involved.)

GUARDED—An input that has a third terminal which is maintained at a potential near the input terminal potential for a single-ended input or near the mean input potential of a differential input. It is used to shield the input termination.

SINGLE-ENDED—A two terminal input circuit in which one of the input terminals is ground.

AMBIENT TEMPERATURE—The prevailing temperature in the immediate vicinity or temperature of the medium surrounding an object.

AMPLITUDE—The magnitude of variation in an alternating quantity from its zero value. It must be modified with an adjective such as "peak," "RMS," "maximum," etc., which designates the specific amplitude to be measured.

AMPLITUDE RESPONSE—The maximum output amplitude obtainable at various points over the frequency range of an instrument operating under rated conditions. In direct writing recorders a sine wave is always used in testing and "amplitude response" is a measure of the instrument's maximum writing capability at various frequencies.

ANALOG OUTPUT—An output signal in which the instantaneous amplitude is continuously proportional to the amplitude of the corresponding input variable. Analog type transducers permit transients to be faithfully reproduced by the direct-writing recorder which does not sample, but measures and records on a continuous basis.

ATTENUATION—The reduction in amplitude of a given stimulus or electrical signal.

BALANCE—A condition of symmetry in an electrical circuit, or the condition of zero output from a device such as a Wheatstone Bridge when properly equalized. Depending on the type of measurement, two general categories of balance may be encountered. For D.C. excitation and steady state conditions, resistive balance is adequate. For a.c. excitation and a.c. signals, both resistive and reactive balance is required.

BONDED STRAIN GAGE—Strain-sensitive elements arranged to facilitate bonding to a surface in order to measure applied stresses.

BREAKDOWN VOLTAGE—The voltage at which electrical equipment will arc over to a structural member. Usually the breakdown voltage level is specified between any ungrounded terminal and the chassis.

CALIBRATION—The process of comparing an instrument, device, or dial with a "standard" to determine its accuracy, capacity, or graduations.

COMBINED ERROR—A term used to specify the largest possible error in an instrument resulting from a combination of adverse conditions. Often applied to the largest error due to the combined effect of nonlinearity and hysteresis.

COMMON MODE REJECTION (Or Inphase Rejection)—A measure of how well a differential amplifier ignores a signal which appears simultaneously at both input terminals.

CRITICAL DAMPING—The value of damping which provides the most rapid transient response *without overshoot.* Has a damping factor of one.

CROSS-TALK—Interference in a given transmitting or recording channel which has its origin in another channel. Often used as equivalent to transverse sensitivity.

DAMPING—The resistance, friction or other cause that diminishes the amplitude of an oscillation with each successive cycle.

DAMPING FACTOR—The ratio of any one amplitude and the next succeeding it in the same sense or direction, when energy is not supplied on each cycle.

DAMPED NATURAL FREQUENCY—The frequency at which a system with a single degree of freedom will oscillate, in the presence of damping, upon momentary displacement from the rest position by a transient force.

DC AMPLIFIER—One which has a frequency response band that goes down to d.c. This classification includes direct coupled amplifiers, but it is not restricted to direct coupled amplifiers.

DECIBEL—Abbreviated db, is a unit used to express log-arithmically, the "ratio" between two amounts of power, P_1 and P_2 existing at two points. By definition,

$$\text{number of db} = 10 \log_{10} \frac{P_1}{P_2}$$

When the source and load impedances are equal the decibel can also be used to express voltage and current ratios.
The ratio then becomes:

$$\text{number of db} = 20 \log_{10} \frac{E_1}{E_2} \text{ or} = 20 \log_{10} \frac{I_1}{I_2}$$

DEMODULATOR—A device which extracts the modulation information from a modulated carrier. In most cases a "denominator" rectifies the incoming modulated carrier frequency and separates the carrier from the desired modulation signal.

DIFFERENTIAL TRANSDUCER—A device which is capable of measuring simultaneously from two separate signal sources and which provides an output proportional to the difference between the two signals.

DIGITAL OUTPUT—An output that represents the magnitude of the stimulus in the form of discrete quantities coded to represent digits in a system of notation. It is normally not a continuous output but one which samples and then displays, records on tape or prints out at predetermined intervals.

DISTORTION—Any change in a signal when the output is not a faithful reproduction of the input.

DITHER—A small electrical signal deliberately injected into an electromechanical device for the purpose of overcoming static friction in the device.

DRIFT—A gradual, unintentional deviation of a given parameter, attributable to any internal or external cause.

DYNAMIC ERROR BAND—A term used to describe the maximum deviation of output amplitude, over a given frequency band, for constant amplitude, sine wave input.

DYNAMIC RUN—A test performed on an instrument to obtain the overall behavior, frequency response, and/or damping and natural frequency of the device.

FORCE BALANCE TRANSDUCER—A transducer in which the output from the sensing member is amplified and fed back to an element which causes the force-summing member to return to its rest position. The magnitude of the signal fed back determines the output of the device.

FREQUENCY-MODULATED SIGNAL—A signal in which the intelligence is contained in the deviation from a center frequency. Consequently the deviation is proportional to the applied stimulus.

FREQUENCY RESPONSE—The portion of the frequency spectrum which can be covered by a device within specified limits of amplitude error.

FULL SCALE—The total interval over which an instrument is intended to operate. Also the output from a transducer when the maximum rated stimulus is applied to the input.

GAIN STABILITY—The maximum change in sensitivity from its initial value, over a stated time period, under rated operating conditions, with any rated signal input.

GROUND—1. A point in a circuit used as a common reference or datum point in measuring voltages. 2. The conducting chassis or framework on which an electrical circuit is physically mounted and to which one point in a circuit is frequently connected. 3. The earth or a low resistance conductor connected to the earth at some point and having no potential difference from another conductor, connected to the earth at the same point.

HYSTERESIS—The summation of all effects, under constant environmental conditions, which cause the output of an instrument to assume different values at a given stimulus point when the point is approached first with increasing stimulus and then with decreasing stimulus. It is customary to express hysteresis in percent of full scale output. Generally the hysteresis is taken over a total increasing and decreasing excursion for the entire range of the instrument.

HYBRID CIRCUIT—An electronic circuit having both vacuum tubes and transistors in order to fully utilize the desirable features of both. The vacuum tube offers high input impedance, closer control of electrical specifications, better temperature stability, and suitability for high voltage applications. The transistor offers small power consumption, small size inherent ruggedness, and large power handling capability at high current levels.

INFINITE RESOLUTION—The capability of providing a stepless, continuous output over the entire range of a device.

INTERNAL CALIBRATION—A specified procedure by which an instrument is deliberately unbalanced or deflected by injecting a known internal "reference" voltage, resistance or other constant into the circuit which produces a predetermined output. This output is then used as a basis for final adjustment of instrument sensitivity.

LINEARITY—A relation such that any change of input signal is accompanied by a similar change in the output which is exactly and directly proportional to the input. Ordinarily, the term "linearity" is used to refer to the nonlinearity error. For recording instruments, "d.c. linearity" normally refers to the maximum nonlinearity error that will be encountered when recording any steady state value. "a.c. linearity" refers to the maximum nonlinearity error that will be encountered when recording alternating values up to the rated writing capability of the instrument.

LOADING ERROR—The error introduced current is drawn from the output of a device.

MAGNETIC DAMPING—The damping of a mechanical motion by means of the reaction between a magnetic field and the current generated by the motion in a conductor moving through the magnetic field. Used to prevent overshooting of moving parts.

NATURAL FREQUENCY—The frequency at which a system with a single degree of freedom will oscillate upon momentary displacement from the rest position by a transient force.

NOISE—Any unwanted electrical disturbance or spurious signal which modifies the transmission, measurement, or recording of desired data.

NONLINEARITY—The difference between the actual instrument output and the expected output as defined by a reference straight line. It may be calculated as deviation from the straight line of the ascending cycle of calibration or on both the ascending and descending applications of stimulus. The deviation is normally expressed as a percentage of full-scale deflection.

NOTCH FILTER—An arrangement of electronic components designed to attenuate or reject a specific frequency or a narrow band of frequencies.

NULL-BALANCE—A condition of balance in a device or system which results in zero output.

OFF-GROUND—The voltage above or below ground at which a device is operated.

OPERATING TEMPERATURE—The temperature, or range of temperatures, over which an instrument is expected to operate within specified limits of error.

OPTIMUM DAMPING—The value of damping which provides good speed of response with some overshoot. Optimum damping is about 65 percent of critical damping.

PARAMETER—An influencing factor which may be varied or held constant while observing the behavior of a device.

PEN CENTERING—An electrical or mechanical adjustment by which an oscillograph pen is positioned to chart center.

PEN POSITIONING—An electrical or mechanical adjustment by which an oscillograph pen is positioned to any desired position on the chart to represent zero input signal.

PHASE—The position at any instant which a periodic wave occupies in its cycle. If amplitude is depicted perpendicular to a time axis, phase may be represented as a position along the time axis. If the time of one period is represented as 360 degrees, the phase position is called the phase angle.

PHASE SHIFT—A change in the phase relationship between two periodic quantities.

PRECISION—A term frequently associated with scientific measurements which refers to the repeatability of the instrument but does not cover other sources of error which may be inherent or present in the measuring system.

PRIMARY CALIBRATION—A calibration procedure in which the instrument output is observed or recorded while the input stimulus is applied under accurately controlled conditions, or received from a primary standard.

RANGE—The quantitative limits of the stimulus between which the instrument is calibrated to perform measurements.

RATED RANGE—The nominal operating range within which a device should be operated in order to maintain the performance characteristics specified by its manufacturer.

REACTIVE BALANCE—The variation of a capacitive or inductive component which is often required to null the output of certain transducers or systems having a.c. excitation.

RELIABILITY—A measure of the probability that an instrument will continue to perform within specified limits of error for a specified length of time under specified conditions.

REPEATABILITY—The maximum deviation from the average of corresponding data points taken from repeated tests under identical conditions for any one stimulus value. The number of stimulus points may include the full range of the instrument or may be limited. The term is often extended to mean the difference in output for any given identically repeated stimulus with no change in the remaining test conditions.

REPRODUCIBILITY—1. Used interchangeably with "repeatability." 2. The capability of being duplicated through the use of standard, commercial reproduction processes.

RESISTANCE BALANCE—The amount of resistance which is often required to null the output of certain transducers or systems.

RESOLUTION—The smallest change in applied stimulus that will produce a detectable change in the instrument output.

RESONANT FREQUENCY—The frequency at which a given system, or object, will respond with maximum amplitude when driven by an external sinusoidal force of constant amplitude.

SCALE FACTOR—The ratio of full-scale output to the value of the measurement at full range, and generally expressed in the unit value per scale division.

SENSITIVITY—That characteristic of an instrument which determines the minimum input signal strength required for causing a desired value of signal output. The "sensitivity" of direct writing recording systems is normally expressed in volts, millivolts or microvolts per chart line of pen deflection. The "full scale sensitivity" of recording systems is also expressed in volts, millivolts or microvolts, which is the minimum signal input capable of causing a pen deflection from chart center to either edge of the chart.

SHUNT CALIBRATION—A form of secondary calibration in which a resistor is placed in parallel across one element of a resistive bridge in order to obtain a known and deliberate electrical unbalance.

SPAN—The reach or spread between two established limits such as the difference between high and low values in a given range of physical measurement.

STABILITY—The degree of freedom from changes in performance of a device or system due to any cause, over a specified period of time. "Stability" is simply the absence of drift.

STATIC ERROR BAND—Maximum deviation of pen from the signal commanded position when an on-scale signal is stopped and held at a given level. The stopped position may be approached from any direction and with any random waveform. This figure includes hysteresis and nonlinearity but does not include paper or electrical drift. It is defined as percent of full scale.

STRAIN—Physical deformation produced in a solid as a result of stress. "Average unit strain" is a more meaningful term which is the total deformation of a body in a given direction divided by the original length in that direction and is usually expressed in microinches per inch.

STRAIN GAGE BASED—Any instrument whose sensing element is composed of bonded or unbonded strain gages.

STRESS—The force acting on the unit area of a solid.

TEMPERATURE EFFECT—The change in performance due to changes in temperature. Specifically the difference between the output at room temperature and at any other specified temperature at any one value of the stimulus within the range of the instrument. It is generally specified in percentage of full-scale output per interval of temperature.

THERMAL COEFFICIENT OF SENSITIVITY—The change in full-scale output due to the effects of temperature only. Usually expressed in percentage of the full-scale output per unit change in ambient temperature.

THERMAL ZERO SHIFT—The maximum change or shift in pen zero due to changes in temperature. More specifically, the shift in pen zero when the instrument goes from room temperature to some other temperature, or covers any specified temperature range.

THERMISTOR—A semiconductor whose resistance varies with temperature in a definite known manner. It is used in circuits to compensate for temperature variations in other parts or it may be used as a temperature sensing element. "Thermistors" generally have negative temperature coefficients, but special types can be made with positive coefficients.

THRESHOLD OF SENSITIVITY—The smallest stimulus or signal that will result in a detectable output.

TIME BASE—A reference time signal recorded at given intervals with the information signal.

TIME CONSTANT—The time required for an exponential quantity to change by an amount equal to 0.632 times the total change that will eventually occur. When a step signal is applied in a capacitor-resistor circuit, it is the number of seconds required for the capacitor to reach 63.2 percent of its full charge after a voltage is applied.

TRANSDUCER—A device which converts energy from one form into another, retaining the characteristic amplitude variations of the energy being converted. Examples: A microphone, which converts acoustical energy into electrical energy; a loud speaker, which does the reverse; or a photocell which converts light energy into electrical energy.

TRANSIENT—A temporary signal of short duration existing while a system is adjusting itself between two different steady state conditions. "Transients" are usually superimposed on the useful signal.

TRANSIENT RESPONSE—The ability of an instrument or system to follow single, nonrepetitive step changes of input signals. Desirable transient response criteria are rapid rise time with a minimum of overshoot "notching" or "ringing."

TUNED FILTER—An arrangement of electronic components which either attenuates or passes signals at a particular frequency.

TURNS RATIO—The ratio of the number of turns in one winding of a transformer to the number of turns in another winding.

VOICE FREQUENCY—The frequency range of ordinary speech, extending from about 100 to 3,000 cycles.

VOLT-AMPERE—The unit of apparent power in an alternating-current circuit. It is equal to the voltage in volts multiplied by the current in amperes without taking phase into consideration.

WAVEFORM—The graphical representation of the shape of a wave, showing variations in amplitude versus time.

WATT—The practical unit of electric power in a direct-current circuit, equal to volts multiplied by amperes. In an alternating-current circuit, watts are equal to volts multiplied by amperes, then multiplied by "circuit power factor."

ZENER DIODE—A semiconductor device frequently used as a constant voltage reference or control element in various electronic circuits or power supplies. The "zener" diode is unique in that its electrical properties are derived from a rectifying junction which works at a reverse bias avalanche condition.

ZERO ADJUSTMENT—Bringing the pointer of an instrument to zero when the input signal is zero.

ZERO LINE STABILITY—The maximum change in pen zero from its initial setting, over a stated period of time, under rated operating conditions, after a suitable warm-up period has permitted the instrument to reach temperature equilibrium.

ZERO SUPPRESSION—A technique of bucking out the static component of a complex signal so that the dynamic portion may be amplified and displayed in more detail on the recorder chart. "Calibrated zero suppression" is a more elaborate, precalibrated system which clearly indicates the magnitude of the static component which is being bucked out for any given setting of the calibrated zero suppression controls.

APPENDIX I

Good Electrical Safety Practices

1. In the patient care setting, never use a two-wire a.c. outlet or a "cheater" adaptor, i.e., an adaptor designed to make it possible to use a three-wire plug in a two-wire outlet. Have an electrician install a three-wire outlet properly grounded.
2. Avoid using extension cords with patient instrumentation.
3. When two or more electrical instruments are used near a single patient, connect them to adjacent a.c. outlets. Widely separated outlets actually have a difference in voltage between their ground connections permitting leakage current to flow.
4. Make certain that all electrical equipment is effectively grounded with three-wire power cords. Even electric radios, lamps, etc., near a patient's bedside should have three-wire cords.
5. Make certain that all metal surfaces that a patient can come in contact with, are grounded.
6. Check power cords and patient cables frequently for intermittent connections, frayed wires, and the overall quality of the conductors.
7. Always wear rubber gloves when handling bare catheter electrode wires or external pacemakers.
8. Try to avoid touching the patient and conductive metal surfaces such as an electric bed or a lamp at the same time.
9. Always consider the patient as part of the electrical circuit and environment.
10. Keep in mind that body moisture or perspiration lowers electrical resistance and permits stronger currents to flow.
11. *Never* ignore "tingling" sensations when touching the frame or the case of an instrument. This warning indicates that a current exists that is *many* times the level which can produce fibrillation if it contacts the heart.
12. Check all electrical equipment periodically to be certain a hazardous voltage is not present on the metal enclosure or frame.
13. Alternating current noise on an ECG tracing may indicate that a hazardous level of current leakage exists.
14. Motors and transformers produce large amounts of current leakage. Any electrical device with a motor or a transformer should be inspected frequently for possible hazards.
15. Promptly report damaged electrical outlets or unusual instrument operation associated with particular outlets.

K. C. Rock, B.S.

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